DOCKET

No. 07-5439 *** CAPITAL CASE ***

Title: Ralph Baze and Thomas C. Bowling, Petitioners

v.

John D. Rees, Commissioner, Kentucky Department of Corrections, et al.

Docketed: July 19, 2007

Lower Ct: Supreme Court of Kentucky

Case Nos.: (2005-SC-0543)

Decision Date: November 22, 2006

Rehearing Denied: April 19, 2007

Questions Presented

~~Date~~~	~~~~~~~Proceedings and Orders~~~~~~~~~~~~~~~~~~~~~~
Jul 11 2007	Petition for a writ of certiorari and motion for leave to proceed in forma pauperis filed. (Response due August 20, 2007)
Aug 20 2007	Brief of respondents John D. Rees, Commissioner, Kentucky Department of Corrections, et al. in opposition filed.
Aug 21 2007	Reply of petitioners Ralph Baze, et al. filed.
Aug 30 2007	DISTRIBUTED for Conference of September 24, 2007.
Sep 6 2007	Supplemental reply brief of petitioners Ralph Baze, et al. filed. (Distributed)
Sep 7 2007	Supplemental brief of petitioners Ralph Baze, et al. filed. (Distributed)
Sep 25 2007	Motion to proceed in forma pauperis and petition for a writ of certiorari GRANTED. The brief of petitioners is to be filed with the Clerk and served upon opposing counsel on or before 2 p.m., Monday, November 5, 2007. The brief of respondents is to be filed with the Clerk and served upon opposing counsel on or before 2 p.m., Monday, December 3, 2007. A reply brief, if any, is to be filed with the Clerk and served upon opposing counsel on or before 2 p.m., Friday, December 28, 2007. Briefs of amici curiae are to be filed with the Clerk and served upon counsel for the parties on or before 2 p.m., 7 days after the brief for the party supported is filed, or if in support of neither party, within 7 days after the petitioner's brief is filed.
Oct 3 2007	The order granting the petition for a writ of certiorari is amended as follows: The motion of petitioners for leave to proceed in forma pauperis is granted. The petition for a writ of certiorari is granted limited to Questions 1, 2, and 3 presented by the petition. The brief of petitioners is to be filed with the Clerk and served upon opposing counsel on or before 2 p.m., Monday, November 5, 2007. The brief of respondents is to be filed with the Clerk and served upon opposing counsel on or before 2 p.m., Monday, December 3, 2007. A reply brief, if any, is to be filed with the Clerk and served upon opposing counsel on or before 2 p.m., Friday, December 28, 2007. Briefs of amici curiae are to be filed with the Clerk and served upon counsel for the parties on or before 2 p.m., 7 days after the brief for the party supported is filed, or if in support of neither party, within 7 days after the petitioners' brief is filed.
Oct 29 2007	Motion for leave to file Volume IV of the joint appendix under seal filed by petitioners Ralph Baze, et al.
Nov 5 2007	Brief of petitioners Ralph Baze, et al. filed.
Nov 5 2007	Joint appendix filed, Volumes I - III. (Statement of costs received)
Nov 8 2007	Brief amici curiae of American Civil Liberties Union, et al. filed.
Nov 12 2007	Brief amici curiae of Critical Care Providers and Clinical Ethicists filed.
Nov 13 2007	Brief amicus curiae of Anesthesia Awareness Campaign, Inc. in Support of Neither Party

filed.

Nov 13 2007 Brief amicus curiae of American Association of Jewish Lawyers and Jurists filed.

Nov 13 2007 Brief amici curiae of Michael Morales, Michael Taylor, Vernon Evans, Jr., and John Gary Hardwick, Jr. filed.

Nov 13 2007 Brief amicus curiae of Human Rights Watch filed.

Nov 13 2007 Brief amicus curiae of Fordham University School of Law, Louis Stein Center for Law and Ethics filed.

Nov 13 2007 Brief amici curiae of Drs. Kevin Concannon, et al. filed.

Nov 13 2007 Brief amicus curiae of American Society of Anesthesiologists in Support of Neither Party filed.

Nov 16 2007 SET FOR ARGUMENT ON Monday, January 7, 2008.

Nov 19 2007 CIRCULATED.

Nov 19 2007 Received from counsel 1 Large binder containing printed transcripts.

Nov 21 2007 Response to motion of petitioner to file volume IV of the joint appendix under seal requested. (Response to motion due December 3, 2007)

Dec 3 2007 Brief of respondents John D. Rees, Commissioner, Kentucky Department of Corrections, et al. filed. (Distributed)

Dec 3 2007 Motion DISTRIBUTED for Conference of December 7, 2007.

Dec 3 2007 Response to motion of petitioner to file volume IV of the joint appendix under seal filed. (Distributed)

Dec 5 2007 Reply of petitioners to response to motion to file volume IV of the joint appendix under seal filed. (Distributed)

Dec 5 2007 Letter of proposal to LODGE copies of a transcript from Dr. Dershwitz' trial deposition in Harbison v. Little, received from counsel for respondents.

Dec 7 2007 Brief amicus curiae of Criminal Justice Legal Foundation filed. (Distributed)

Dec 7 2007 Brief amici curiae of Texas, et al. filed.

Dec 7 2007 Letter of opposition to respondents' lodging proposal received from counsel for petitioners.

Dec 10 2007 Motion for leave to file Volume IV of the joint appendix under seal GRANTED.

Dec 10 2007 Motion of the Solicitor General for leave to participate in oral argument as amicus curiae and for divided argument filed.

Dec 10 2007 Brief amicus curiae of United States filed. (Distributed)

Dec 10 2007 Record received from Supreme Court of Kentucky. (1 box)

Dec 10 2007 Record received from Franklin County Kentucky Circuit Court. (2 boxes)

Dec 18 2007 Letter from counsel for respondents received.

Dec 27 2007 Lodging proposal of respondents approved by Clerk of Court.

Dec 28 2007 Reply of petitioners Ralph Baze, et al. filed. (Distributed)

Jan 4 2008 Motion of the Solicitor General for leave to participate in oral argument as amicus curiae and for divided argument GRANTED.

Jan 7 2008 Argued. For petitioners: Donald B. Verrilli, Jr., Washington, D.C. For respondents: Roy T. Englert, Jr., Washington, D.C.; and Gregory G. Garre, Deputy Solicitor General, Department of Justice, Washington, D.C. (for United States, as amicus curiae.)

PETITION FOR WRIT OF CERTIORARI

10

No. 07-5439

IN THE

SUPREME COURT OF THE UNITED STATES

RALPH BAZE, ET AL.,

Petitioner

v.

JOHN D. REES, ET AL.,

Respondent

ON PETITION FOR A WRIT OF CERTIORARI TO THE SUPREME COURT OF KENTUCKY

PETITION FOR A WRIT OF CERTIORARI

CAPITAL CASE

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CAPITAL CASE

QUESTIONS PRESENTED

Although the Court has authorized civil actions challenging portions of a method of execution, it has not addressed the constitutionality of a method of execution or the legal standard for determining whether a method of execution violates the Eighth Amendment in over 100 years--leaving lower courts with no guidance on the law to apply to the many lethal injection challenges filed since the Court's rulings allowing the claim in a civil action. Lower courts have been left to look to cursory language in the Court's opinions dealing with the the death penalty on its face and prison conditions. As a result, the law applied by lower courts is a haphazard flux ranging from requiring "wanton infliction of pain," "excessive pain," "unnecessary pain," "substantial risk", "unnecessary risk," "substantial risk of wanton and unnecessary pain," and numerous other ways of describing when a method of execution is cruel and unusual.

Considering that at least half the death row inmates facing an imminent execution in the last two years have filed suit challenging the chemicals used in lethal injections, certiorari petitions and stay motions on the issue are arriving before the Court so often that this issue is one of the most common issues. Thus, it is important for the Court to determine the appropriate legal standard, particularly because the difference between the standards being used is the difference between prevailing and not.

This case presents the Court with the clearest opportunity to provide guidance to the lower courts on the applicable legal standard for method of execution cases. This case arrives at the Court without the constraints of an impending execution and with a fully developed record stemming from a 20-witness trial. The record contains undisputed evidence that any and all of the current lethal injection chemicals could be replaced with other chemicals that would pose less risk of pain while causing death than the tri-chemical cocktail currently used. Although this automatically makes the risk of pain associated with the use of sodium thiopental, pancuronium bromide, and potassium chloride unnecessary, relief was denied on the basis that a "substantial risk of wanton and unnecessary pain" had not been established. This squarely places the issue of whether "unnecessary risk" is part of the cruel and unusual punishment equation and whether an "unnecessary risk" exists upon a showing that readily available alternatives are known.

The Kentucky Supreme Court's decision gives rise to the following important questions:

I. Does the Eighth Amendment to the United States Constitution prohibit means for carrying out a method of execution that create an unnecessary risk of pain and suffering as opposed to only a substantial risk of the wanton infliction of pain?

II. Do the means for carrying out an execution cause an unnecessary risk of pain and suffering in violation of the Eighth Amendment upon a showing that readily available alternatives that pose less risk of pain and suffering could be used?

III. Does the continued use of sodium thiopental, pancuronium bromide, and potassium chloride, individually or together, violate the cruel and unusual punishment clause of the Eighth Amendment because lethal injections can be carried out by using other chemicals that pose less risk of pain and suffering?

IV. When it is known that the effects of the chemicals could be reversed if the proper actions are taken, does substantive due process require a state to be prepared to maintain life in case a stay of execution is granted after the lethal injection chemicals are injected?

PARTIES TO THE PROCEEDING BELOW

The plaintiffs in the state court trial and the appellants on appeal to the Kentucky Supreme Court were Ralph Baze and Thomas C. Bowling - - two Kentucky death-sentenced inmates. They are the Petitioners in this action.

The following parties were named as defendants in the circuit court proceedings: John D. Rees, Commissioner of Kentucky Department of Corrections; Glenn Haeberlin, then the Warden of the Kentucky State Penitentiary where Kentucky executions are carried out; and, Ernie Fletcher, Governor of the Commonwealth of Kentucky.

In the Kentucky Supreme Court, the following parties were appellees: John D. Rees, Glenn Haeberlin, and Ernie Fletcher.

Thomas Simpson succeeded Glenn Haeberlin as Warden of the Kentucky State Penitentiary. Thus, he, not Haeberlin, is the appropriately named Respondent here. Rees and Fletcher remain as Commissioner of the Kentucky Department of Corrections and Governor of the Commonwealth of Kentucky, respectively. Thus, they are also named Respondents in this petition.

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I. In the wake of this Court's rulings that challenges to aspects of lethal injection as a method of execution are cognizable in civil actions, lower courts are struggling -- with little to no guidance from this Court since 1878 - - to determine the legal standard applicable to the mass of legal challenges arguing that a particular aspect of a method of execution is cruel and unusual punishment. The result is numerous variations of legal standards that turn out to be dispositive of the outcome and courts exerting an extraordinary amount of time trying to figure out the appropriate legal standard, which could and should be alleviated by this Court articulating a uniform legal standard for determining whether the chemicals or procedures used in lethal injections constitute cruel and unusual punishment in violation of the Eighth Amendment to the United States Constitution. 8

A. Because challenges to the chemicals and procedures used in lethal injections are probably the most commonly recurring legal claim today and because lethal injection claims are taking up more of this Court's and lower courts' time in capital cases, determining the applicable legal standard to apply to Eighth Amendment method of execution claims will have a wide impact and it will save all courts an enormous amount of time that could be spent on other legal issues 10

B. The fact that this Court has not addressed the constitutionality of a method of execution since 1878 has left the lower courts in a state of disarray in determining the applicable legal standard and has resulted in courts ruling that death-sentenced inmates have little to no likelihood of success on the merits – rendering this Court's rulings in *Nelson* and *Hill* little more than a formality that has created additional litigation before the lower courts. 12

C. The varying legal standards state and federal courts apply to lethal injection claims conflict and can be the difference between being executed under a risk of pain and suffering and not. 18

D. The issue of whether the chemicals and procedures currently used in lethal injections poses an unnecessary risk of pain and suffering is an important question of federal law that has not been, but should be, settled by this Court. 21

II. The fact that a stay of execution could be granted after the first or second lethal injection chemical is injected is a foreseeable event, but without this Court's intervention, inmates in Kentucky and the rest of the states that carry out lethal injections - - except New Jersey - - will die because the Departments of Corrections are not adequately prepared to reverse the effects of the chemicals and are doing nothing about it, even though the effects of the chemicals could easily be reversed if the proper equipment is used.. 23

III. Unlike all previous lethal injection cases to arrive at this Court, this case presents an ideal vehicle for addressing the questions presented and the issues discussed in I and II in a manner that will apply to all lethal injection challenges and in a manner that will alleviate the need to grant certiorari in some future case to resolve issues left open by this case - - the equitable principles for determining whether to grant a stay of execution are irrelevant since no execution date is currently scheduled, the record (including the effect of all the chemicals) is fully developed, the record is undisputed that the lethal injection chemicals could be replaced with alternative chemicals that pose less risk of pain and suffering, and the record is undisputed that Respondents do not have the proper equipment to maintain life if a stay of execution is granted after the first and/or second lethal injection chemical is administered..... 24

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Liptak, *Trouble Finding Inmate's Vein Slows Lethal Injection In Ohio*, New York Times May 3, 2006. 21

Long and Caputo, *Lethal Injection Takes 34 Minutes to Kill Inmate*, MiamiHerald.com, Dec. 14, 2006. 21

Mangels, *Condemned Killer Complains Lethal Injection Isn't Working*, The Plain Dealer, May 3, 2006. 21

Provence and Hall, *Problems Bog Down Execution of Clark: Drugs Take His Life After 86 Minutes*, Toledoblade.com, May 3, 2006. 21

Reuters, *Killer Executed the Hard Way: Condemned Man Sits Up and Tells Executioners, 'It's Not Working,'* CNN.com, May 2, 2006. 21

Ryan, *Injection Problems Delay Ohio Execution*, HoustonChronicle.com, May 2, 2006 21

Smyth, *Afters States' Longest Delay, Man Executed for Cellmate Murder*, Chillocothegazette.com, May 24, 2007 21

Smyth, *Condemned Killer Complains Lethal Injection Isn't Working*, The Plain Dealer, May 3, 2006. 21

Smyth, *Ohio Executes Man for Killing Cellmate*, Philly.com, May 3, 2006 21

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No.

IN THE

SUPREME COURT OF THE UNITED STATES

RALPH BAZE, ET AL.,

Petitioner

v.

JOHN D. REES, ET AL.,

Respondent

ON PETITION FOR A WRIT OF CERTIORARI TO THE SUPREME COURT OF KENTUCKY

PETITION FOR A WRIT OF CERTIORARI

Petitioners, Ralph Baze and Thomas C. Bowling, pray that a Writ of Certiorari issue to review the opinion of the Supreme Court of Kentucky affirming the denial of Petitioners' declaratory judgment action challenging the chemicals and procedures used in Kentucky lethal injections.

CITATIONS TO OPINION BELOW

The opinion of the Kentucky Supreme Court, *Baze, et al. v. Rees, et al.*, is published at 217 S.W.3d 307 (Ky. 2006), and is attached as part of the appendix (1-10). The unpublished order denying the timely filed petition for rehearing by a vote of 6-1 is attached. (Appendix at 11). The Franklin Circuit Court order denying the declaratory judgment action is unpublished and attached as part of the appendix (Appendix at 12–25).

JURISDICTION

This Court's jurisdiction to review the decision of the Supreme Court of Kentucky is invoked pursuant to 28 U.S.C. § 1257(a). The Supreme Court of Kentucky issued its decision on November 22, 2006, and denied the timely petition for rehearing on April 19, 2007. This petition has been filed within 90 days of that decision.

CONSTITUTIONAL PROVISIONS INVOLVED

The Eighth Amendment to the United States Constitution provides in pertinent part:

> Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

The Fourteenth Amendment to the United States Constitution provides in pertinent part:

> No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

STATEMENT OF THE CASE[1]

Kentucky carries out lethal injections by injecting the same three chemicals used by all states other than New Jersey that carry out lethal injections: 1) sodium thiopental; 2) pancuronium bromide; and, 3) potassium chloride. This tri-chemical cocktail was first adopted in Oklahoma and first used in 1982 in Texas.

Sodium thiopental is a short-acting barbiturate that begins to wear off almost immediately. When sodium thiopental was first adopted as part of the lethal injection protocol, it was a state-of-the-art anesthetic. Since then, it has been replaced in surgical settings by propafol. Pancuronium bromide is a neuromuscular blocking agent that paralyzes all voluntary muscle movements, but has no impact on the ability to feel pain. It prevents a person from speaking,

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[1] The official record of Kentucky court proceedings is a videotape. Here, the record is comprised of more than ten videotapes. Because this case is only at the petition for a writ of certiorari stage and this Court does not use videotape records, Petitioners have not included videotape citations to trial testimony in this case.

moving, or expressing any other outward signs of pain or consciousness, but is extremely agonizing in a conscious person as the inflicted person suffocates just as if he or she was drowning with weights on his or her body to prevent movement. Potassium chloride, otherwise known as road salt used to melt ice, is injected to cause cardiac arrest, but is excruciatingly painful in a conscious person.

When used in lethal injections, sodium thiopental serves the purpose of rendering the condemned inmate unconscious. Pancuronium bromide is supposed to stop respiration, and potassium chloride is supposed to cause cardiac arrest. Because potassium chloride stops the heart from beating, death can and would be caused without the use of pancuronium bromide - - a drug that is not permitted to be used to euthanize animals. Other than to pronounce death, doctors are not involved in Kentucky lethal injections, and the chemicals are injected from a room adjacent to the execution chamber.

After learning of the chemicals used in lethal injections, Petitioners filed a civil action in a Kentucky trial court arguing that the chemicals and procedures used in lethal injections create an unnecessary risk of pain and suffering. While Petitioners raised numerous arguments, only four are relevant to this Petition for a Writ of Certiorari: 1) the Eighth Amendment prohibits the unnecessary risk of pain and suffering and that a risk of pain and suffering is automatically unnecessary when other chemicals or procedures could be used that pose less risk of pain and suffering; 2) the use of pancuronium bromide is unnecessary because death is caused without it; 3) each of the lethal injection chemicals could be replaced with one or more chemicals that would pose less risk of pain and suffering; and, 4) the Department of Corrections does not have the necessary equipment on hand to perform its constitutional duty under the due process clause

and the Eighth Amendment of maintaining life if a stay of execution was granted after the first or second lethal injection chemical had been injected.

After Respondents' motions to dismiss and for summary judgment were denied, this case went to trial on the merits. The trial lasted seven days, although many of the days were not full days. Approximately twenty witnesses testified, including the following witnesses who testified on Petitioners' behalf: the Chief Medical Examiner in Kentucky; the State's toxicologist; a law professor who has conducted extensive research on lethal injection protocols and how they were adopted, numerous Department of Corrections officials; the then head of Toxicosurveillance for the United States Government, who was also an employee of the Poison Control Center; and, an anesthesiologist who is also a Professor at Columbia Medical School. Respondent presented testimony from the Commissioner of the Department of Corrections (who was also called by Petitioners) and an anesthesiologist who, unlike that Petitioners' anesthesiologist, was paid for his testimony.

At trial, it was established that Respondents had conducted no studies to determine what chemicals to use in lethal injections, but merely relied upon what other states had "successfully" used. Further, undisputed testimony from both the experts for Petitioners and the expert for Respondent established that, if pancuronium bromide was eliminated from the execution process, death would be caused without any additional risk of pain and suffering. This would lessen the risk of pain and suffering because it would make monitoring for consciousness substantially easier. Likewise, undisputed testimony established that sodium thiopental could be replaced with propafol, or that propafol could be used as the only lethal injection chemical. Eliminating pancuronium bromide would lessen the risk of pain and suffering because it would increase the

likelihood that the inmate would be unconscious throughout the execution, and, if used alone, would mean that excruciatingly painful chemicals are not injected.

Finally, undisputed testimony established that potassium chloride could be replaced by another chemical that would stop the heart, such as Dilantin - - a chemical that is less likely than potassium chloride to cause pain. Despite the fact that this undisputed testimony established that the risk of pain and suffering caused by the currently used tri-chemical cocktail was unnecessary because it could easily be avoided, the trial court and the Kentucky Supreme Court upheld the use of these chemicals.

Likewise, the Kentucky courts did nothing about Respondents' inability to maintain life if a stay of execution is granted after the first or second chemical was injected. When this issue was raised at the trial court, it concerned Respondents so much that they purchased a "crash cart" and guaranteed that a doctor would be available during executions to use the crash cart if a last-minute stay of execution is granted. While this appears to be an improvement and, on its face, might appear to resolve the problem, in reality, trial testimony established that it was the equivalent of a pitcher attempting to hide the emery board he used to scuff up the baseball.

At trial, Respondents provided a list of the chemicals and equipment contained in its crash cart. Respondents' expert, Dr. Mark Dershwitz, was asked about the equipment and chemicals, and informed the trial court that those items were insufficient to maintain life after the first or second lethal injection chemicals were injected. Dr. Dershwitz testified that medications to increase blood pressure and contract the heart, as well as, insulin, neostigmine, and artificial ventilation are necessary to maintain life after sodium thiopental and/or pancuronium bromide have been injected into a person. As Dr. Dershwitz pointed out at trial, none of these medications are part of Respondents' crash cart. Despite the obvious deficiencies with

Respondents' crash cart that render it utterly useless and incapable of maintaining life if a stay of execution is granted after the first or second chemical is injected, the trial court denied relief on this claim. Although raised to the Kentucky Supreme Court, that court failed to address this claim.

Petitioners' case arrives at this Court on a fully developed record after a thorough trial on the merits. At the time the trial took place, it was the first full trial in the country on the merits of the constitutionality of the chemicals and procedures used in lethal injections. While there have since been other trials, this case is now the first case raising these issues based on a fully developed record and no immediate execution date to arrive before this Court.

HOW THE FEDERAL QUESTIONS WERE RAISED AND DECIDED BELOW

Petitioners argued in the trial court and on appeal to the Kentucky Supreme Court that the appropriate legal standard for determining whether a portion of a method of execution is cruel and unusual punishment in violation of the Eighth Amendment to the United States Constitution is whether the method poses an "unnecessary risk" of pain and suffering. Petitioners further argued that, in the context of lethal injection, a risk of pain is rendered "unnecessary" when it can easily be avoided by using alternative chemicals or procedures that lessen the risk of pain and suffering. To that end, at trial, Petitioners presented undisputed evidence that each of the lethal injection chemicals could be replaced with one or more chemicals that pose less risk of pain and suffering.

In deciding this case, the trial court noted that "[e]vidence was considered that other drugs were available that may decrease the possibility of pain" or that "may further assure the condemned person feels no pain." Appendix at 21-22. But, relying on the legal standard that Petitioners must establish that the chemicals or procedures inflict "unnecessary physical pain,"

the trial court denied relief. Appendix at 22. The Kentucky Supreme Court affirmed this decision, after articulating that the appropriate legal standard is "whether the procedure for execution creates a substantial risk of wanton and unnecessary infliction of pain, torture or lingering death." *Baze, et al. v. Rees, et al.*, 217 S.W.3d 207, 209 (Ky. 2006), appendix at 3.

Likewise, Petitioners argued before the trial court that the due process clause of the United States Constitution requires Respondents to take affirmative steps to maintain life if a stay of execution is granted after the first or second chemical is injected. In response to this claim, Respondents purchased a crash cart. At trial, however, Petitioners established that the crash cart did not contain the proper equipment. Despite this, the trial court held that the "Kentucky method recognizes the necessary steps for revival sufficient to satisfy the due process rights of the convicted parties." Appendix at 22. Without determining whether Respondents are implementing the steps they recognized, the trial court denied relief on this claim. *Id.* This issue was also raised on appeal. Although the Kentucky Supreme Court noted the trial court's findings and conclusions of law on this issue, the Kentucky Supreme Court failed to address this issue.

REASONS FOR GRANTING THE WRIT

I. In the wake of this Court's rulings that challenges to aspects of lethal injection as a method of execution are cognizable in civil actions, lower courts are struggling - - with little to no guidance from this Court since 1878 - - to determine the legal standard applicable to the sudden mass of legal challenges arguing that a particular aspect of a method of execution is cruel and unusual punishment. The result is numerous variations of legal standards that turn out to be dispositive of the outcome and courts exerting an extraordinary amount of time trying to figure out the appropriate legal standard, which could and should be alleviated by this Court articulating a uniform legal standard for determining whether the chemicals or procedures used in lethal injections constitute cruel and unusual punishment in violation of the Eighth Amendment to the United States Constitution.

In *Nelson v. Campbell*, 541 U.S. 637 (2004), and *Hill v. McDonough*, 126 S.Ct. 2096 (2006), this Court cleared the path for legal challenges to the chemicals and procedures used in lethal injections. Not surprisingly, in the wake of this, at least half of the death-sentenced inmates facing an imminent execution have challenged various aspects of the lethal injection process, placing pressure on the lower courts and this Court to resolve this complex issue under the shadow of an execution date. With no impending execution, this case is not one of those last minute attempts to stave off an execution. Nonetheless, the large number of these types of cases percolating throughout the state and federal courts (both under execution warrant and not) indicates the importance of this Court taking this case to articulate the proper legal standard for determining whether a method of execution (or a portion of it) is cruel and unusual punishment.

Complicating the burden on the lower courts is the fact that this Court has not directly addressed the constitutionality of a method of execution since 1878 (*Wilkerson v. Utah*, 99 U.S. 130 (1878)), but has made cursory reference to varying different standards in cases that have nothing to do with executions. This has resulted in state and federal courts extrapolating standards from non-capital cases to create a legal standard to apply to method of execution cases.

Unfortunately, the legal standard differs between jurisdictions. This difference can be the difference between suffering an excruciatingly painful death by lethal injection and dying in a

dignified manner. And, even when "unnecessary" is found to be part of the legal standard, courts are only paying lip-service to the word, for upholding the use of particular lethal injection chemicals when other chemicals could be used that pose less risk of pain and suffering flies in the face of the ordinary meaning of "unnecessary." Simply, if a readily available alternative exists, the risk of pain and suffering from not using this alternative is unnecessary.

No person should face the risk of excruciating pain and suffering merely because of the state or federal jurisdiction in which the person is condemned. Lower courts should not be forced to continue spending immense amount of time attempting to ascertain the applicable legal standard to use in determining whether a portion of a method of execution constitutes cruel and unusual punishment when this Court can easily provide guidance and resolve the confusion over the applicable legal standard.

As three members of this Court recognized in dissenting from the denial of a stay of execution in *Brown v. Crawford*, 544 U.S. 1046 (2005) (Stevens, joined by, Ginsburg, and Breyer, JJ., dissenting from the denial of a stay of execution), the issue of whether the chemicals and procedures used in lethal injections constitutes cruel and unusual punishment is an important question of federal law for which substantial evidence exists suggests it does violate the Eighth Amendment. To adequately address this, the applicable legal standard must first be settled by this Court. As explained in more detail below, for these reasons certiorari should be granted.

A. Because challenges to the chemicals and procedures used in lethal injections are probably the most commonly recurring legal claim today and because lethal injection claims are taking up more of this Court's and lower courts' time, in capital cases, determining the applicable legal standard to apply to Eighth Amendment method of execution claims will have a wide impact and it will save all courts an enormous amount of time that could be spent on other legal issues.

The number of lethal injection challenges filed in the wake of *Nelson* and *Hill* is astronomical. To present a representative sampling, Petitioner looked at just the past two years. Between 2006 and 2007, nearly half of the 76 non-volunteers executed in this country raised Eighth Amendment challenges to the chemicals and procedures used in lethal injections, some of them raising the claim in both state and federal court and many of them arriving at this Court in the context of a last-minute motion for a stay of execution.[2] In addition, numerous inmates whose executions have been stayed for other reasons or whose execution date have not been set have pending litigation raising Eighth Amendment arguments challenging the chemicals and

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[2] *See, e.g., Workman v. Bredesen*, 486 F.3d 896 (6th Cir. 2007); *Jones v. Allen*, 485 F.3d 635 (11th Cir. 2007); *Cooey (Filiaggi) v. Strickland*, 484 F.3d 424 (6th Cir. 2007); *Hamilton v. Jones*, 472 F.3d 814 (10th Cir. 2007); *Lambert v. Buss*, 2007 WL 1710939 (7th Cir. 2007); *Woods v. Buss*, 2007 WL 1302119 (7th Cir. 2007); *Dickson v. Livingston*, 2007 WL 1228612 (5th Cir. 2007); *In re Dickson*, 2007 WL 1228554 (5th Cir. 2007); *Pippin v. Quarterman*, 2007 WL 1011639 (5th Cir. 2007); *Diaz v. McDonough*, 472 F.3d 849 (11th Cir. 2006); *Rutherford v. McDonough*, 467 F.3d 1297 (11th Cir. 2006); *Hill v. McDonough*, 464 F.3d 1256 (11th Cir. 2006); *Brown v. Livingston*, 457 F.3d 390 (5th Cir. 2006); *Resendiz v. Livingston*, 454 F.3d 455 (5th Cir. 2006); *Reese v. Livingston*, 453 F.3d 289 (5th Cir. 2006); *Alley v. Little*, 452 F.3d 621 (6th Cir. 2006); *Brown v. Beck*, 445 F.3d 752 (4th Cir. 2006); *Smith v. Johnson*, 440 F.3d 262 (5th Cir. 2006); *Neville v. Johnson*, 440 F.3d 221 (5th Cir. 2006); *Rutherford v. Crosby*, 438 F.3d 1087 (11th Cir. 2006); *Summers v. Texas Dept. Criminal Justice*, 206 Fed.Appx. 317 (5th Cir. 2006); *Patton v. Jones*, 193 Fed.Appx. 785 (10th Cir. 2006); *Alley v. Little*, 186 Fed.Appx. 604 (6th Cir. 2006); *Boltz v. Jones*, 182 Fed.Appx. 824 (10th Cir. 2006); *Alley v. Little*, 181 Fed.Appx. 509 (6th Cir. 2006); *Wilson v. Livingston*, 179 Fed.Appx. 228 (5th Cir. 2006); *Kincy v. Livingston*, 173 Fed.Appx. 341 (5th Cir. 2006); *Hughes v. Johnson*, 170 Fed.Appx. 878 (5th Cir. 2006) ; *Bieghler v. Donahue*, 163 Fed.Appx. 419 (7th Cir. 2006), *injunction vacated by, Donahue v. Bieghler*, 126 S.Ct. 1190 (2006); *Jones v. Allen*, 483 F.Supp.2d 1142 (M.D.Ala. 2007); *Dickson v. Livingston*, 2007 WL 1467242 (N.D.Tex. 2007); *Woods v. Buss*, 2007 WL 1280664 (S.D.Ind); *Lambert v. Buss*, 2007 WL 1280659 (S.D.Ind); *Lenz v. Johnson*, 443 F.Supp.2d 785 (E.D.Va. 2006); *Kincy v. Livingston*, 2006 WL 734424 (S.D.Tex.); *Smith v. Johnson*, 2006 WL 644424 (S.D.Tex. 2006); *Vinson v. Johnson*, 2006 WL 4509943 (E.D.Va.); *Brown v. Beck*, 2006 WL 3914717 (E.D.N.C.); *Hill v. McDonough*, 2006 WL 2598002 (N.D.Fla.); *Hill v. McDonough*, 2006 WL 2556938 (N.D.Fla.); *Rutherford v. Crosby*, 2006 WL 228883 (N.D.Fla.); *Resendiz v. Livingston*, 2006 WL 1787989 (S.D.Tex.); *Alley v. Little*, 2006 WL 1697207 (M.D.Tenn.); *Alley v. Little*, 2006 WL 1207611 (M.D.Tenn.); *Moody v. Beck*, No. 5:06-CT-3020 (E.D.N.C. 2006); *Malicoat v. State*, 137 P.3d 1234 (Okla.Crim.App. 2006); *Ex Parte O'Brien*, 190 S.W.3d 677 (Tex.Crim.App.); *Rutherford v. Crist*, 945 So.2d 1113 (Fla. 2006); *Rolling v. State*, 944 So.2d 176 (Fla. 2006); *Hill v. State*, 921 So.2d 579 (Fla. 2006); *Ex Parte Hinojosa*, 2006 WL 2370240 (Tex.Crim.App.); *Ex Parte Moore*, 2007 WL 117702 (Tex.Crim.App.); *Ex Parte Herron*, 2006 WL 1412259 (Tex.Crim.App. 2006); *Bieghler v. State*, 839 N.E.2d 691 (Ind. 2005).

procedures used in lethal injections that will require the lower courts to figure out the appropriate legal standard for determining whether a portion of a state's method of execution violates the Eighth Amendment prohibition of cruel and unusual punishment.[3] The large number of these types of cases already percolating throughout the court system along with the additional ones that we can anticipate will be filed in the near future or as an execution date approaches makes the constitutionality of the chemicals and procedures used in lethal injections perhaps the most commonly recurring issue litigated in capital cases. Before reaching the merits of these claims, every court addressing it will first have to determine what legal standard applies. This Court can easily resolve this by granting certiorari in this case and laying out the appropriate legal standard. Doing so will save the lower courts a great deal of time, provide guidance on an issue that this Court has not addressed in more than a hundred years, and prevent inconsistent rulings and standards of proof resulting from courts applying different legal standards. In light of the large number of lethal injection cases currently pending and expected to be filed, making this one of the few cases that this Court will review in its upcoming term will be of great benefit to both litigants and courts, perhaps a greater benefit as far as the number of impacted cases than any other case this Court can or will review.

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[3] Litigation concerning the chemicals and procedures used in lethal injections is currently pending outside the context of an execution warrant in at least the following states: Arkansas, California, Delaware, Florida, Indiana, Kentucky, Maryland, Missouri, Ohio, Oklahoma, Tennessee, and the federal government. *See, e.g., Taylor v. Crawford*, 2007 WL 1583874 (8th Cir.); *Taylor v. Crawford*, 457 F.3d 902 (8th Cir. 2006); *Taylor v. Crawford*, 445 F.3d 1095 (8th Cir. 2006); *Morales v. Tilton*, 465 F.Supp.2d 972 (N.D. Cal. 2006); *Morales v. Hickman*, 438 F.3d 926 (9th Cir. 2006); *Moore v. Rees*, 2007 WL 1035013 (E.D.Ky.); *Taylor v. Crawford*, 2007 WL 803151 (E.D.Mo.); *Morales v. Hickman*, 415 F.Supp.2d 1037 (N.D.Cal. 2006); *Evans v. Saar*, 412 F.Supp.2d 519 (D.Md. 2006); *Taylor v. Crawford*, 2006 WL 1779035 (W.D.Mo.); *Anderson v. Evans*, 2006 WL 83093 (W.D.Okla.); *Nooner v. Norris*,

B. The fact that this Court has not addressed the constitutionality of a method of execution since 1878 has left the lower courts in a state of disarray in determining the applicable legal standard and has resulted in courts ruling that death-sentenced inmates have little to no likelihood of success on the merits – rendering this Court's rulings in *Nelson* and *Hill* little more than a formality that has created additional litigation before the lower courts.

Although nearly 1100 executions have been carried out since the beginning of 1977, this Court last addressed the constitutionality of a method of execution so long ago that the Bill of Rights had yet to be applied to the states, the right to counsel for indigent defendants was an aberration at best, the concept that the Eighth Amendment involved the evolving standards of decency had yet to be articulated, and anyone who was alive then would be at least 128 years old.

The year was 1878 and the issue was the constitutionality of the firing squad. In *Wilkerson v. Utah*, 99 U.S. 130 (1878), this Court upheld the use of the firing squad, noting that the Eighth Amendment only prohibited forms of torture. One surely did not expect that this would be the one and only time that this Court would directly address the constitutionality of a method of execution or the legal standard for determining whether the method of execution violates the Eighth Amendment.

While not directly addressing the appropriate legal standard, during the past 128 years, this Court has made reference to when a punishment violates the Eighth Amendment, but only in the context of dicta, general death penalty cases that have nothing to do with the method of execution or even the Eighth Amendment, prison condition cases, and deliberate indifference cases. In *In re Kemmler*, 136 U.S. 436, 447 (1890), a case involving the privileges and immunities clause of the Fifth Amendment to the United States Constitution, this Court stated that the Eighth Amendment prohibits "something more than the mere extinguishment of life,"

No. 5:06-cv-00110 (E.D.Ark.); *Jackson v. Taylor*, No. 06-300 (D.Del.); *State v. Lightbourne*, No. 81-170-CF (Fla.

such as "torture or a lingering death." Then, in *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 463 (1947), a case dealing with whether electrocuting a person a second time after the first time failed due to human error that was not likely to repeat itself violates double jeopardy, this Court stated that a punishment is cruel and unusual when it is "purposeless and needless," and that the Eighth Amendment "forbids the infliction of unnecessary pain in the execution of the death sentence." Whether these cases, which were decided before the Eighth Amendment was incorporated to the states, were intended to provide guidance as to when a method of execution violates the Eighth Amendment is unknown. What is known, though, is that the lack of additional guidance from this Court has forced lower courts to rely on these antiquated and outdated cases, and that this Court has complicated the issues by using language in non-method of execution cases dealing with cruel and unusual punishment without saying whether that language applies to method of execution cases.

In *Gregg v. Georgia*, 428 U.S. 153, 173 (1976), which dealt with the constitutionality of the death penalty on its face and as applied, this Court stated that the cruel and unusual punishment clause prohibits "the unnecessary and wanton infliction of pain." Then, in *Helling v. McKinney*, 509 U.S. 25, 33 (1993), a case that has nothing to do with the death penalty, this Court ruled that the Eighth Amendment "requires a court to assess whether society considers the risk that the prisoner complains of" to be more than the Constitution tolerates. This was followed by *Farmer v. Brennan*, 511 U.S. 825, 846 (1994), a deliberate indifference case for placing an inmate in general population, in which this Court ruled that the cruel and unusual punishment test is whether the state officials disregard an "objectively intolerable risk of harm." Did this Court intend for these non-death penalty and non-method of execution cases to articulate the test for determining whether a method of execution (or a portion of it) violates the cruel and

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Cir. Ct, 5th Jud. Cir.); *Timberlake v. Buss*, No. 1:06-cv-01859 (S.D.Ind.).

unusual punishment clause of the Eighth Amendment to the United States Constitution? This question also remains unanswered by this Court, forcing the lower courts to fumble around to try and make sense out of the differing, and, sometimes, contrary language this Court has used to explain the cruel and unusual punishment clause of the Eighth Amendment.

Is a method of execution cruel and unusual punishment in violation of the Eighth Amendment only if it causes "torture or a lingering death?" Or, is it cruel and unusual if the pain is "purposeless and needless," even if it is known to not cause "torture or a lingering death?" Does this mean that chemicals or procedures used in lethal injection are purposeless and needless in violation of the cruel and unusual punishment when other chemicals that are less painful could be used? Perhaps, all that needs to be shown is that the chemicals and procedures inflict "unnecessary" pain? But, does this mean that whenever a state does not replace the lethal injection chemicals with readily available less painful chemicals, the Eighth Amendment is violated? Or is "unnecessary and wanton infliction of pain" considered to be one thing, whereby it must be shown that it is both "unnecessary" and "wanton" for an Eighth Amendment violation to be found? Or, is establishing an "objectively intolerable risk of harm" all that is needed? Is a risk of pain automatically objectively intolerable where alternative chemicals could be used, or does the risk need to be shown to be "substantial?" Do these different articulations of the cruel and unusual punishment standard work together so that the Eighth Amendment is violated where a risk of pain and suffering becomes "unnecessary" because other chemicals could be used that pose less of a risk? And, now that this Court, in *Nelson* and *Hill*, has characterized 42 U.S.C. §1983 suits challenging the chemicals and procedures used in lethal injections as most akin to prison condition cases, must a death-row inmate establish both cruel and unusual punishment and that prison officials are acting "deliberately indifferent" to that?

These are the questions that the lower courts must ask and answer in deciding the numerous lethal injection challenges resulting from this Court's decisions in *Nelson* and *Hill* - - the questions that have been spawned by the vastly different terminology this Court has used to discuss the cruel and unusual punishment clause in many different contexts, and this Court's failure to address the issue in more than 100 years. The result is numerous variations of the standard that require a different showing to prevail.

After analyzing the various decisions rendered by this Court, the Ninth Circuit held that a challenge to a method of execution must be considered in terms of the risk of pain. *Campbell v. Wood*, 18 F.3d 662, 687 (9th Cir. 1994). The Ninth Circuit later clarified this standard by ruling that a portion of a method of execution is cruel and unusual punishment when it subjects the inmate to "an unnecessary risk of unconstitutional pain or suffering." *Cooper v. Rimmer*, 379 F.3d 1029, 1033 (9th Cir. 2004). The Ninth Circuit, however, never articulated what makes a risk of pain unnecessary. Other courts have avoided this question by applying a much narrower test to determine when a method of execution (or portion of it) is cruel and unusual punishment.

The United States Courts of Appeals for the Tenth Circuit and the Eighth Circuit have ruled that the "controlling standard is that [execution] procedures not involve the unnecessary and wanton infliction of pain." *Hamilton v. Jones*, 472 F.3d 814, 816 (10th Cir. 2007); *accord*, *Taylor v. Crawford*, 2007 WL 1583874, *6 (8th Cir.). The federal district court for the Eastern District of Virginia has characterized the inquiry as whether there is an "objectively substantial risk of harm." *Walker v. Johnson*, 448 F.Supp.2d 719, 722 (E.D. Va. 2006). Both the Connecticut Supreme Court and the Kentucky Supreme Court in this case have held that "[a] method of execution is viewed as cruel and unusual punishment under the federal constitution when the procedure for execution creates a **substantial** risk of wanton and unnecessary infliction

of pain, torture, or lingering death." *State v. Webb*, 750 A.2d 448, 454 (Conn. 2000) (emphasis added); *Baze v. Rees*, 217 S.W.3d 207, 209 (Ky. 2006) (appendix at 3) ("substantial risk of wanton and unnecessary infliction of pain.").

The Indiana Supreme Court looks at it a little differently, ruling that a method of execution is cruel and unusual punishment in violation of the Eighth Amendment when it presents "**any unacceptable** risk of a lingering death or the wanton infliction of pain." *Bieghler v. State*, 839 N.E.2d 691, 696 (Ind. 2005) (emphasis added). The Tennessee Supreme Court has ruled that the Eighth Amendment cruel and unusual punishment clause is violated when a method of execution inflicts unnecessary physical or psychological pain and suffering. *Abdur'Rahman v. Bredesen*, 181 S.W.3d 292, 307 (Tenn. 2005).

The United States District Court for the Southern District of Indiana has thrown, perhaps, the biggest curveball to anyone trying to make sense of the various doctrines, incorporating both the deliberate indifference standard from prison condition cases and the general cruel and unusual punishment standard to require a death-sentenced inmate to establish both an unnecessary risk of pain and that the Department of Corrections is deliberately indifferent to that risk of pain. *Woods v. Buss*, 2007 WL 1280664, *8 (S.D. Ind.).

Finally, the United States Court of Appeals for the Sixth Circuit stated that a method of execution is cruel and unusual punishment when it involves the "unnecessary and wanton infliction of pain," but then threw in the towel over the difficulty of figuring out how this Court intended for the cruel and unusual punishment test to be applied to method of execution cases, noting that this Court "has considered three [method of execution] challenges under the Eighth Amendment, only one of which reached the merits," and since then "has had ample opportunities to constrain methods of execution that seem to raise far greater risk of cruel and unusual

punishment than lethal injection, but it has declined to do so." *Workman v. Bredesen*, 486 F.3d 896, 906-07 (6th Cir. 2007). Because of how rarely this Court has addressed the issue and this Court's reluctance to do so, the Sixth Circuit punted on the issue, holding that, without Supreme Court guidance or intervention on the issue, the likelihood of success is slim to none, thereby negating the need to decide the claim on the merits.

As the Sixth Circuit recognized, if the constitutional issue this Court's rulings in *Nelson* and *Hill* intended to be addressed on the merits is to be reached, this Court needs to say so and articulate the proper legal standard for doing so in order to prevent chaos in the lower courts and a massive amount of wasted time and money. Otherwise, due to the numerous different standards currently applied by the lower courts, one or more of those courts will surely apply what this Court will later find to be the incorrect standard. This Court should avoid such an unfortunate and irreparable situation by now settling the issue of what legal standard applies.

For purposes of whether to grant this petition for a writ of certiorari, which of the states or federal courts has the better hand on the legal standard is not the important question. Rather, the important fact is that differing standards that cannot be reconciled with each other are being applied by the lower courts and that this Court can easily resolve this by articulating one standard so that the standard of proof and whether a condemned inmate prevails on this important question of federal constitutional law does not depend upon which jurisdiction the inmate is incarcerated.

C. The varying legal standards state and federal courts apply to lethal injection claims conflict and can be the difference between being executed under a risk of pain and suffering and not.

If this was preparation for major league baseball's draft, the pitcher with the 95 mile per hour fastball would appear to be a top choice until a scout notices some major flaws in the pitcher's mechanics, realizes that the pitcher will likely break down, and recommends not drafting him. The various legal standards for determining when a method of execution is cruel and unusual punishment is the legal version of the broken down pitcher with a 95 miles per hour fastball. At first blush, one could think that the different words lower courts have used to articulate when a method of execution is cruel and unusual punishment is a distinction without a difference. But, when one pays closer attention, analyzes the words, and looks at the outcome, it becomes apparent that the standards are very different, meaning that death-sentenced inmates must prove different things depending on what jurisdiction the inmate is confined.

"Substantial" is not the same as "unnecessary" or "unacceptable." Pain is not the same as risk of pain. And, deliberate indifference is an added element beyond anything involving risk of pain. If the death-sentenced inmate is in a federal court within the jurisdiction of the Ninth Circuit, the inmate prevails upon showing an unnecessary risk of pain and suffering. This exact same showing could be made in numerous other jurisdictions, but due to the conflicting legal standards applied, the death-sentenced inmate would lose. If the case was in the Eighth and Tenth Circuit, risk may not even be a factor, but if it is, the inmate would also have to show that it is "wanton." In federal courts in Virginia, the inmate could establish an "unnecessary risk," but still lose because he did not establish that the risk was "substantial." This is also true in Connecticut and Kentucky, where an inmate has to show a substantial risk of "wanton and unnecessary" infliction of pain. In Indiana, the inmate could establish both that the risk of pain is

unnecessary and substantial, but still lose because he did not show it was "unacceptable." And, in federal courts in Indiana, the inmate could satisfy all these standards, but still lose because he did not establish that the Department of Corrections was acting deliberately indifferent to the risk of pain and suffering. While this explains how these standards are different and how it can effect the outcome, the difference is, perhaps, best explained by looking at the application of it in federal courts in California in comparison to the application of it here, in Kentucky.

In *Morales v. Tilton*, 465 F.Supp.2d 972 (N.D.Cal. 2006), a federal district court analyzed a challenge to the chemicals and procedures used in lethal injections under the "unnecessary risk" of pain and suffering standard and reached the conclusion that while California's execution protocol is constitutional when properly administered, the deficiencies in the protocol appear to be correctable and are unnecessary; thereby meaning that California's execution protocol creates an unnecessary risk of pain and suffering in violation of the Eighth Amendment's prohibition of cruel and unusual punishment. *Id.* at 982.

In stark contrast to *Morales* is the instant case, where the Kentucky courts applied the "substantial risk" of wanton and unnecessary infliction of pain standard. Petitioners presented unrefuted evidence that any risk of pain associated with the use of the tri-chemical cocktail now used by all states other than New Jersey could be replaced by one or more chemicals that would lessen the risk of pain and suffering. By any ordinary definition of "unnecessary," this establishes that the risk of pain and suffering from Kentucky's lethal injection chemicals is unnecessary. But, by looking at what Kentucky's lethal injection chemicals do when properly administered and what happened during the one lethal injection in Kentucky, the Kentucky Supreme Court reached the conclusion that the risk of pain and suffering was not "substantial,"

and thus denied relief. *Baze, et al.* v. *Rees, et al.*, 217 S.W.3d 207, 212 (Ky. 2006) (appendix at 8-9). The difference between *Morales* and *Baze* appears clear on its face.

If Petitioners were in the the Ninth Circuit, they would have prevailed because they would have established an "unnecessary risk," which is all that is required under the Ninth Circuit's understanding of when a method of execution is cruel and unusual punishment. Because Petitioners are not in the Ninth Circuit, but instead are confined in Kentucky, they lost because they did not prove a "substantial risk" that the "unnecessary risk" would take place. As a result, without this Court's intervention, they will die in a manner where they could suffer pain that could easily be avoided. Whether one goes to his or her death under conditions that could cause pain and suffering should not depend on the jurisdiction in which the inmate committed the offense. Rather, the risk of pain and suffering should be treated the same regardless of where the case originates. Either *Morales* and Petitioners should prevail or neither should. Which outcome this Court chooses is not as important as making a uniform determination of the applicable standard so all death-sentenced inmates are treated the same. This is particularly so when we are dealing with, as we are here, the risk of inflicting pain that can be easily avoided and the public's confidence in how states are carrying out lethal injections.

D. The issue of whether the chemicals and procedures currently used in lethal injections poses an unnecessary risk of pain and suffering is an important question of federal law that has not been, but should be, settled by this Court.

How lethal injections are carried out in this country is a matter of grave concern. As the Oklahoma Court of Criminals stated, in 2005, if the allegations concerning problems with the lethal injection chemicals and procedures are true, "they merit serious attention." *Murphy v. Oklahoma*, 124 P.3d 1198, 1209 n.23 (Okla.Crim.App. 2005). Since that time, Ohio carried out an execution that took approximately ninety minutes, as the condemned inmate looked up and said the chemicals are not working.[4] A year later, Ohio carried out another lengthy execution. This time it lasted about two hours - - so long that the condemned inmate had to take a bathroom break.[5] And, Florida carried out an execution that took 34 minutes as the inmate was seen grimacing in pain and moving throughout, only for officials to later realize he suffered twelve inch chemical burns on both arms.[6] These executions have cast a pall over lethal injections in this country and have lessened the public's confidence in how executions are being carried out. These executions along with the proposition, for which there can be no dispute, that the death penalty is a matter of grave public concern make the legal standard for determining whether a portion of a method of execution is cruel and unusual punishment and important issue that should be settled by this Court.

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[4] *See*, Adam Liptak, *Trouble Findign Inmate's Vein Slows Lethal Injection in Ohio*, New York Times (May 3, 2006); John Mangels, *Condemned Killer Complains Lethal Injection 'Isn't Working,'* The Plain Dealer (May 3, 2006); Jim Provance and Christina Hall, *Problems Bog Down Execution of Clark: Drugs Take his Life After 86 Minutes*, Toledoblade.com (May 3, 2006); Reuters, *Killer Executed the Hard Way: Condemned Man Sits Up and Tells Executioners, 'It's Not Working,'* Cnn.com (May 2, 2006); Erica Ryan, *Injection Problems Delay Ohio Execution*, HoustonChronicle.com (May 2, 2006).

[5] *See*, Julie Carr Smyth, *After States' Longest Delay, Man Executed for Cellmate Murder*, Chillicothegazette.com (May 24, 2007); Julie Carr Smyth, *Ohio Executes Man for Killing Cellmate*, Philly.com (May 24, 2007).

[6] *See*, Ron Word, *Official: Execution Took Longer Because Needles Pierced Veins*, Orlando Sentinel (Dec. 15, 2006); Phil Long and Marc Caputo, *Lethal Injection Takes 34 Minutes to Kill Inmate*, MiamiHerald.com (Dec. 14, 2006); Chris Tisch and Curtis Krueger, *Second Dose Needed to Kill Inmate*, TampaBay.com (Dec. 14, 2006); Chris Tisch and Curtis Krueger, *Executed Man Takes 34 Minutes to Die*, TampaBay.com (Dec. 13, 2006)

While one may think that the issue of the method of execution is best settled by the legislature or by the forum of public opinion, whether the problematic executions described above could have been avoided by applying the proper test to determine if a portion of a method of execution is cruel and unusual punishment or even if the above executions would constitute cruel and unusual punishment is an important matter of federal constitutional law. If this Court adopts the "unnecessary risk" standard Petitioner suggests, the horribly disturbing executions that took place in Florida and Ohio can be avoided not only there but in all other states. And, if this Court adopts a different standard, at least all death-sentenced inmates will be treated the same and know what standard they must satisfy, and all Departments of Corrections will know what they need to do to meet minimum constitutional standards. This would be a win, win for the courts, the public, and the parties. The amount of litigation and time spent on it would be substantially lessened. The parties would know what proof and evidence needs to be presented. And, the public's confidence that lethal injections are being carried out in a constitutional manner will be restored.

These issues all revolve around the important question of federal constitutional law of what standard of proof must be met to show that a portion of a method of execution constitutes cruel and unusual punishment in violation of the Eighth Amendment to the United States Constitution. Certiorari should be granted to resolve this important question of federal constitutional law.

II. The fact that a stay of execution could be granted after the first or second lethal injection chemical is injected is a foreseeable event, but without this Court's intervention, inmates in Kentucky and the rest of the states that carry out lethal injections - - except New Jersey - - will die because the Departments of Corrections are not adequately prepared to reverse the effects of the chemicals and are doing nothing about it, even though the effects of the chemicals could easily be reversed if the proper equipment is used.

As the New Jersey Superior Court recognized, although "the grant of a stay of execution communicated to prison authorities after the lethal injection has been administered is not a likely event, it can happen." *In the Matter of Readoption with Amendments of Death Penalty Regulations*, 842 A.2d 207, 211 (N.J. Super. 2004). And, one of Petitioners' experts at trial testified, it has happened in the past.[7] Thus, "it is a foreseeable occurrence. And should it occur, there can be no justification for depriving that inmate a chance at life." *Id.* Yet, that is exactly what will happen here and likely in all future executions if this Court does not take this case and rule that the due process clause requires the Department of Corrections to obtain the proper equipment to maintain life if a stay of execution is granted after the first or second chemical is injected.

The testimony in this case establishes that if the proper equipment is on hand, there would be relatively little difficulty maintaining life after the first two chemicals have been injected. According to Respondents' own expert at trial, this equipment must include medications to increase blood pressure and contract the heart, insulin, neostigmine, and artificial ventilation. Despite their own expert saying this, Respondents have not obtained this equipment, thereby rendering their "crash cart" useless. Why? The answer is simple. As Respondents counsel at trial stated, "the likelihood of this occurring [is] so remote that it is as likely as a plane crashing into the Kentucky State Penitentiary during an execution." While it may be unlikely,

this does not mean that the due process right to life does not apply or that Respondents' obligations dissipate.

A stay of execution creates an affirmative obligation under contemporary standards of decency and morality to take measures to give the inmate a chance to continue living. *Id.* Yet, measures that have any chance of allowing the inmate to continue living will not be taken in any state other than New Jersey unless this Court takes this case and affirmatively states that the Constitution requires the Departments of Corrections to take such measures and to ensure that the measures include the equipment necessary to maintain life. When it comes to life and death, there can be no substitute for doing all that is reasonably possible to maintain life when the law does not permit the execution. This Court's intervention is necessary to ensure this fundamental principle is recognized and applied to death row inmates who receive a last-minute stay of execution.

III. Unlike all previous lethal injection cases to arrive at this Court, this case presents an ideal vehicle for addressing the questions presented and the issues discussed in I and II in a manner that will apply to all lethal injection challenges and in a manner that will alleviate the need to grant certiorari in some future case to resolve issues left open by this case - - the equitable principles for determining whether to grant a stay of execution are irrelevant since no execution date is currently scheduled, the record (including the effects of all the chemicals used) is fully developed, the record is undisputed that the lethal injection chemicals could be replaced with alternative chemicals that pose less risk of pain and suffering, and the record is undisputed that Respondents do not have the proper equipment to maintain life if a stay of execution is granted after the first and/or second lethal injection chemical is administered.

To understand why this case is different than all the lethal injection cases that have come before it and why this case presents the most succinct and complete record for this Court to address the important legal issues raised by challenges to the chemicals and procedures used in lethal injections, it is first important to understand what this case is not. It is not about whether

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[7] It is undersigned counsel's understanding that Clarence Hill was already strapped to the lethal injection gurney when this Court stayed his execution. If the stay came in only minutes later, the chemicals would likely have begun

lethal injection should be used as a method of execution or even if it is constitutional on its face. It is not about the constitutionality of one particular chemical, as was the case in *Abdur-Rahman*. It is not even about the facial constitutionality of the tri-chemical cocktail used in nearly all executions. It is not a quickly constructed, incomplete record compiled in a short period of time due to an impending execution looming overhead. It is not about a factual dispute over whether the chemicals or procedures used in Kentucky lethal injections (or any lethal injection) causes the wanton infliction of pain and suffering. And, it is not a battle of the experts. Rather, this case asks a simple question that has been difficult to answer and left unanswered by this Court for more than a century - - what is the legal standard for determining whether a method of execution is cruel and unusual punishment in violation of the Eighth Amendment to the United States Constitution?

In this regard, this case is about whether using chemicals or a procedure that create a known risk of pain and suffering violates the cruel and unusual punishment clause when the chemicals and procedures could be replaced with alternatives that cause less risk of pain and suffering. And, it is about whether, after a stay of execution is granted, a state can allow an execution to take place merely by not using the necessary equipment to reverse the effects of the lethal injection chemicals. In these regards, this case is vastly different than the lethal injection cases previously before this Court that have essentially asked this Court to prohibit the use of a particular chemical. Yet, this case - - with the fully developed record and clear-cut issues that impact the resolution of all lethal injection cases - - will settle issues that must be resolved before reaching the merits of the constitutionality of any particular chemical. And, no case previously before this Court has addressed a state's obligation to maintain life if a stay of execution is granted after the first or second lethal injection chemical is injected.

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to be injected.

With the exception of *Abdur'Rahman*, which addressed only the constitutionality of injecting pancuronium bromide during lethal injections, apparently all petitions for a writ of certiorari dealing with the chemicals or procedures used in lethal injections have come to this Court in the context of a motion for a stay of execution. Because of that, those cases suffered from obvious problems, not the least of which are that the standard for granting a stay of execution had to be addressed and that the claims had to be addressed in an expedited fashion on substantially less than a fully developed record. This case is not like that.

This case arrives at this Court without any of the time constraints or additional legal issues created by an impending execution. It has a fully developed, detailed record from the testimony of twenty witnesses. There was extensive testimony about the chemicals Kentucky and all states other than New Jersey use to carry out lethal injections. Undisputed testimony from both Petitioners' and Respondents' experts established that "many non painful ways of stopping the heart" exist that would reduce the risk of the extremely painful burning sensation that is caused by potassium chloride to zero. The trial court made a factual finding that pancuronium bromide serves no therapeutic purpose during lethal injections and has no effect on pain. Appendix at 19. The trial court also noted that "[e]vidence was considered that other drugs were available that decrease the possibility of pain" and that "other drugs are available that may further assure that the condemned feels no pain." Appendix at 21-22. These findings were upheld by the Kentucky Supreme Court. *Baze, et al v. Rees, et al.*, 217 S.W.3d 207, 210-13 (Ky. 2006) (appendix at 4-6, 9).

Despite the findings of the trial court, both the trial court and the Kentucky Supreme Court ruled that the tri-chemical cocktail used to carry out lethal injections comports with the Eighth Amendment, even though the courts recognized that the risk of pain and suffering

associated with these chemicals could be avoided. This is despite the fact that Petitioners argued that the cruel and unusual punishment clause of the Eighth Amendment prohibits the unnecessary risk of pain and suffering and that the undisputed testimony that the chemicals could be replaced with other chemicals that pose less risk of pain and suffering makes any risk of pain and suffering associated with the current chemical cocktail unnecessary and thus cruel and unusual punishment.

Likewise, Petitioners argued that the due process right to life was being violated by the fact that Respondents do not have the proper equipment to maintain life if a stay of execution is granted after the first or second chemicals is injected. Even Respondents' only expert admitted that the first two chemicals are reversible and that Respondents' "crash cart" does not contain the necessary equipment to do so. Yet, Petitioners' due process claim was rejected.

The record makes these facts undisputed. Unlike many other cases and the previous lethal injection cases to arrive before this Court, no factual dispute over the likelihood that something will occur is relevant to the issues present to this Court. Rather, the record is clear that the current lethal injection chemicals could be replaced with chemicals that pose less risk of pain and suffering and that the effects of the lethal injection chemicals could be reversed if Respondents use the proper equipment, which they currently do not. Without a dispute about these facts, the legal issues are squarely before this Court in a fashion where no impediments to merits review exist, and the result of clarifying the legal standard in Petitioners' favor is clear - - a lower court would have to find that the risk of pain and suffering associated with the lethal injection chemicals currently used is unnecessary in violation of the Eighth Amendment and Respondents will have to obtain the proper equipment for maintaining life. The undisputed facts leave no alternative if this Court clarifies the applicable legal standard in favor of Petitioners.

Thus, this case comes down to pure legal issues that are outcome determinative and that a massive numbers of courts have been struggling to interpret and apply, resulting in many different interpretations that are the difference between prevailing and not prevailing. This case provides a clear and easy opportunity to resolve these legal issues.

CONCLUSION

For the above reasons, Petitioners respectfully request that this Court grant the petition for a writ of certiorari.

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July 11, 2007

OPPOSITION BRIEF

07-5439

IN THE
SUPREME COURT OF THE UNITED STATES
OCTOBER TERM, 2006

RALPH BAZE, ET AL. — **PETITIONER**

v.

JOHN D. REES, ET AL. — **RESPONDENTS**

RESPONDENTS' BRIEF IN OPPOSITION TO PETITION FOR WRIT OF CERTIORARI TO THE SUPREME COURT OF UNITED STATES

CAPITAL CASE

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COUNTERSTATEMENT OF QUESTIONS PRESENTED

I. Does the Eighth Amendment to the United States Constitution require the elimination of remote, insubstantial risks of pain and suffering?

II. In the unlikely event that a stay of execution is ordered after the administration of one or more of the lethal injection drugs, do the Eighth and Fourteenth Amendments require the Commonwealth of Kentucky to implement extraordinary measures beyond providing reasonable emergency medical care in order to attempt to maintain the life of the inmate?

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The opinion below, Baze and Bowling v. Rees, et al., is published at 217 S.W.3d 207 (Ky. 2006). The petition for rehearing was denied on April 19, 2007. The unpublished trial court order denying the Petitioners' declaratory judgment was issued on July 8, 2005. A true copy of the order in Baze and Bowling v. Rees, et al., Civil Action No. 04-CV-1094 (Franklin Cir. 2005), is included in the Appendix to the Petitioner's Petition for Writ of Certiorari.

JURISDICTION

Respondents accept the statement of jurisdiction appearing in the petition, except that review is barred because the Petitioners now concede that their application for relief was a post-conviction challenge to their sentences of death, and thus, is procedurally barred as an unauthorized successive application for post-conviction relief.

CONSTITUTIONAL PROVISIONS INVOLVED

The Constitutional provisions involved are the Eighth and Fourteenth Amendments to the United States Constitution. These Constitutional provisions are quoted from in the petition.

STATUTORY PROVISIONS INVOLVED

Ky.R.Crim.Proc. 11.42 3

Ky.R.Civ.Proc. 76.44 3

COUNTERSTATEMENT OF THE CASE

On January 30, 1992, Petitioner Ralph Baze ambushed and murdered Powell County, Kentucky Sheriff Steve Bennett and Deputy Sheriff Arthur Briscoe, who were attempting to serve several Ohio felony warrants on the Petitioner. The Petitioner shot Sheriff Bennett three times in the back with an SKS semi-automatic assault rifle, killing the Sheriff. Deputy Briscoe returned fire with a pistol until he ran out of ammunition. The Deputy was attempting to run for cover when the Petitioner shot him twice in the back with the assault rifle. As the officer lay face down, the Petitioner punched Deputy Briscoe with the muzzle of the rifle, then executed the Deputy with a shot to the back of the head from point blank range.[1]

On April 9, 1990, Thomas C. Bowling shot and killed Eddie and Tina Earley, and wounded the Earley's two-year-old son, as the victims sat inside their automobile in a parking lot of a dry cleaning business in Lexington, Kentucky. Petitioner Bowling's automobile had crashed into the driver's side of the Earley's vehicle, Bowling got out of his automobile, shot the victims, then returned to his vehicle and fled from the scene.[2]

The Petitioners filed the action below in the Franklin Circuit Court on August 8, 2004,[3] ostensibly for the purpose of challenging the constitutionality of specific aspects of the lethal injection protocol used to carry out executions in Kentucky. The Petitioners specifically stated that the action was not intended as a challenge to their death sentences or to the carrying out of their death sentences.

Testimony at the trial established that the risk of any condemned inmate being conscious during an execution was extremely remote. The testimony also established that the Petitioners' allegations that the risk of pain and suffering could be reduced by eliminating one or more of the

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[1] *See* Baze v. Com., 965 S.W.2d 817,819-20 (Ky.1997).
[2] *See* Bowling v. Com., 873 S.W.2d 175, 176-77 (Ky.1994).

drugs used in Kentucky's lethal injection protocol[4], or by the use of alternate drugs or combinations of drugs during lethal injections was speculative, at best. The trial court found, and the Kentucky Supreme Court unanimously affirmed, that Kentucky's lethal injection protocol did not expose condemned inmates to a substantial risk of wanton or unnecessary pain or suffering. Baze and Bowling v. Rees, et al., 217 S.W.3d 207, 210-12 (Ky. 2006).

In addition, testimony at trial established that Kentucky's execution protocol calls for a doctor to be present on site and available to provide medical care to the condemned inmate in the unlikely event that a stay is granted after one or more of the lethal injection chemicals were administered to the inmate. The testimony established that an automated defibrillator and a "crash cart" containing certain medical equipment, medications and supplies was present in case a stay was issued and the condemned inmate had to be revived. The testimony also established that the odds of reviving an inmate after administration of the second lethal injection drug (pancuronium bromide) or the third lethal injection drug (potassium chloride) are minimal, even in a hospital setting.

The Petitioners argued that any inmate executed in error because of a late stay would be deprived of due process and fundamental fairness if the state did not take every possible step to correct the error and revive the inmate. The trial court found, and the Kentucky Supreme Court affirmed, that the Kentucky's lethal injection protocol was sufficient to satisfy the due process and fundamental fairness rights of condemned inmates in the event of a late stay, the trial court finding that "[t]he standards the [Petitioners] would have this Court apply would require that all executions take place in a trauma center with a team of cardiac surgeons standing by."[5]

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[3] Baze and Bowling v. Rees, et al., Civil Action 2004-CV-1094 (Franklin Cir.2005).
[4] Kentucky and most other lethal injection states utilize sodium thiopental, pancuronium bromide, and potassium chloride in their lethal injections protocol. See Baze and Bowling v. Rees, et al., 217 S.W.2d 207, 212 (Ky. 2006).
[5] Findings of Fact and Conclusions of Law at 11, Baze and Bowling v. Rees, et al., Civil Action 2004-CV-1094

REASONS WHY CERTIORARI SHOULD BE DENIED

I. THE PETITION FOR RELIEF WAS PROCEDURALLY DEFAULTED.

In the case below, the Respondents asserted as an affirmative defense that the Petitioners' action was procedurally barred as the functional equivalent of a successive application for post-conviction relief, which is prohibited under Ky.R.Crim.Proc. 11.42.[6] Throughout this case, however, the Petitioners have evaded the procedural bar of Ky.R.Crim.Proc. 11.42 by contending that their action did not involve a challenge to their death sentences, but rather, challenged only the constitutionality of certain specific procedures used by the State of Kentucky to carry out executions by lethal injection.

After the Kentucky Supreme Court denied the Petitioners' motion for reconsideration on April 19, 2007 in the action below, the Petitioners filed a motion pursuant to Ky.R.Civ.P. 76.44[7] for a stay of enforcement of the Kentucky Supreme Court's Opinion pending the Petitioner's application for a Writ of Certiorari. In relevant part, Ky.R.Civ.Proc. 76.44(a) provides that a stay "shall be granted in appeals involving a sentence of death." The Petitioners, wanting to take advantage of this automatic stay provision of Ky.R.Civ.Proc. 76.44, then made the admission in their CR 76.44 motion to stay enforcement of the Kentucky Supreme Court's Opinion pending application for a Writ of Certiorari[8] that "the 'sentence of death' was clearly at issue in this case," and that "[b]ecause the case involves the carrying out of Baze's and Bowling's death

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(Franklin Cir.2005). A copy of the unpublished Findings of Fact and Conclusions of Law entered by the trial court on July 8, 2005 in Civil Action 2004-CV-1094 was included in the Appendix to the Petitioner's Petition for Writ of Certiorari.

[6] The full text of Ky.R.Crim.Proc. 11.42 is included in the Appendix. *See also* Crick v. Commonwealth, 550 S.W.2d 534 (Ky.1977).

[7] The full text of Ky.R.Civ.Proc. 76.44 is included in the Appendix.

[8] A true copy of the Petitioners' CR 76.44 Motion to Stay Enforcement of Opinion Pending Application for Writ of Certiorari filed on April 19, 2007 in Baze and Bowling v. Rees, et al., Appeal No. 2005-SC-000543, is included in the Appendix.

sentences, the mandatory provisions of [Rule] 76.44 applies."[9]

The Petitioners have thus admitted that their action does involve a challenge to the death sentences themselves and the carrying out of their death sentences, making their action the functional equivalent of a prohibited successive application for post-conviction relief. *See* Hill v. McDonough, __U.S.__, 126 S.Ct. 2096, 2101-02, 165 L.Ed.2d 44 (2006). The result is that the Petitioners' action is procedurally barred under Ky.R.Crim.Proc. 11.42. *See* Gross v. Commonwealth, 648 S.W.2d 853 (Ky.1983). The Petition for Writ of Certiorari should therefore be denied.

II. THE CASE PRESENTS NO UNIQUE ISSUES OF LAW OR FACT THAT MERIT THE GRANTING OF CERTIORARI

The case below presents no unique issues of law or fact that merit the granting of certiorari. Stripped of the Petitioners' impassionate pleas for further review, the Petitioners' action below is indistinguishable from any number of actions working their way through the state and federal court systems since this Court's decision in Hill v. McDonough. The action below involves all of the same legal challenges to the three-drug protocol used in Kentucky and in the majority of other states in which lethal injection has been adopted as the primary statutory method of execution.[10] The Petitioners' claims in the case below were substantially the same as those raised in numerous federal court actions across the nation, a number of which have already been the subject of Federal Circuit Court rulings.[11]

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[9] Petitioners' 76.44 Motion to Stay Enforcement of Opinion Pending Application for Writ of Certiorari at 2.

[10] In fact, the Petitioners currently have motions to intervene pending in a federal district court case in which other death row inmates have raised substantially the same issues as the Petitioners raised in the action below. *See* Moore et al. v. Rees et al., 3:06:CV 00022 (E.D.Ky., filed April 19, 2006).

[11] *See, e.g.,* Workman v. Bredesen, 486 F.3d 896, 908-910 (6th Cir. May 7, 2007) ("no state or federal court has entered a final decision invalidating the three-drug protocol"); Taylor v. Crawford, 487 F.3d 1072, 2007 WL 1583874 (8th Cir. June 4, 2007); Hamilton v. Jones, 472 F.3d 814, 416-417 (10th Cir. Jan. 4, 2007).

In addition, the Petitioners are mistaken in their assertions that courts are reaching disparate results in determining the constitutionality of lethal injection protocols across the nation, or that clarification is needed to assist courts in ascertaining the applicable legal standards. A number of Federal Circuit Courts have had the opportunity to review the constitutionality of the three-drug execution protocol used in Kentucky and most other states that have adopted lethal injection as the primary statutory method of execution, and each has determined lethal injection to be constitutional under the test set forth in Gregg v. Georgia, 428 U.S. 153, 96 S.Ct.2902, 49 L.Ed.2d 859 (1976). Each Federal Circuit Court considering the issue to date has found that the three-drug lethal injection protocol does not create a substantial risk of wanton or unnecessary infliction of pain, torture or lingering death. Id. The reason given is because the evidence has shown that the administration of the overdose of the first lethal injection drug, sodium thiopental, is sufficient to ensure that the condemned inmate will be unconscious for hours, thus eliminating any substantial risk that the inmate might experience pain. [12] *See, e.g.*, Workman v. Bredesen, 486 F.3d 896, 908-910 (6th Cir. May 7, 2007); Taylor v. Crawford, 487 F.3d 1072, 2007 WL 1583874 (8th Cir. June 4, 2007); Hamilton v. Jones, 472 F.3d 814, 416-417 (10th Cir. Jan. 4, 2007).

Other state and federal courts issuing final judgments in lethal injection cases across the nation have unanimously reached the same conclusion, including a number of recent final judgments.[13] The case decisions cited by the Petitioners as reaching different conclusions are all interlocutory trial court rulings on preliminary injunction motions, none of which have

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[12] *See, e.g.*, Workman v. Bredesen, 486 F.3d 896, 908-910 (6th Cir. May 7, 2007) ("no state or federal court has entered a final decision invalidating the three-drug protocol"); Taylor v. Crawford, 487 F.3d 1072, 2007 WL 1583874 (8th Cir. June 4, 2007); Hamilton v. Jones, 472 F.3d 814, 416-417 (10th Cir. Jan. 4, 2007).

[13] *See* Workman v. Bredesen, 486 F.3d 896, 908-910 (6th Cir. May 7, 2007) ("no state or federal court has entered a final decision invalidating the three-drug protocol").

progressed to trial or resulted in final judgments. In at lease one recent case, a federal district court's failure to follow the standard announced in Gregg v. Georgia resulted in a swift reversal upon appeal. Taylor v. Crawford, 487 F.3d 1072, 2007 WL 1583874 (8th Cir. June 4, 2007) (rejecting the district court's application of Constitutional standard requiring elimination of all known risks).

Furthermore, the Petitioners are mistaken in their belief that the Kentucky Supreme Court somehow failed to apply the correct legal standard in affirming the trial court's judgment in the action below. In their Petition, the Petitioners seem to suggest that the Kentucky Supreme Court rejected any notion that a risk of unnecessary pain and suffering could ever rise to the level of a constitutional violation. To the contrary, the Kentucky Supreme Court's opinion specifically recognized that "A method of execution is considered to be cruel and unusual punishment under the Federal Constitution when the procedure for execution creates a *substantial risk* of wanton and unnecessary infliction of pain, torture or death." Baze and Bowling v. Rees, et al., 217 S.W.3d 207 (Ky. 2006), *rehearing denied,* (April 19, 2007), *citing* Gregg v. Georgia, *supra.* Thus, the Kentucky Supreme Court simply applied the same legal standard that has been unanimously applied by all state and federal courts issuing final decisions to date on the constitutionality of the three-drug lethal injection used in most states that have reinstated the death penalty since Gregg v. Georgia.

The standard espoused by Petitioners would place Kentucky and all other jurisdictions using lethal injection as the statutory means of execution down an endless road of litigation over whether their lethal injection protocols could somehow be changed to further reduce the already remote chance that a condemned inmate could be conscious during an execution. Condemned inmates will never run out of ideas for changes to the procedures, drugs or equipment used to

during lethal injection.

The Kentucky Supreme Court reviewed the matter and confirmed the trial court's determination that Kentucky's lethal injection protocol eliminated any substantial risk of unnecessary pain and suffering to the Petitioners. The Kentucky Supreme Court also affirmed the trial court's determination that Kentucky's lethal injection protocol was sufficient to satisfy the due process and fundamental fairness rights of Petitioners in the event of a late stay following the introduction of one or more of the lethal injection drugs. The Petitioners may disagree with the factual findings in the case below, but their dissatisfaction with the factual findings is a poor reason for the Petitioners to ask this Court to grant certiorari.

CONCLUSION

The case below does not present any unique issues of law or fact that merit certiorari. Final judgments issued by federal and state courts across the nation have unanimously upheld in upholding the constitutionality of the three-drug lethal injection protocol utilized in Kentucky and in the vast majority of states having adopted lethal injection as the statutory method of execution. The Courts have not been inconsistent in their application of the appropriate legal standard in these cases. Furthermore, the Petitioners have procedurally defaulted by admitting that their actions involve a legal challenge to their sentences of death.

For all these reasons, the Respondents submit that certiorari is not warranted. The Respondents respectfully urge this Court to deny Petitioners' petition.

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NO. 07-5439

IN THE
SUPREME COURT OF THE UNITED STATES
October Term, 2006

RALPH BAZE, et al. **PETITIONER**

versus

COMMONWEALTH OF KENTUCKY **RESPONDENT**

Proof of Service

I, Jeffrey T. Middendrof, a member of the Bar of this Court, hereby certify that on the 20th day of August, 2007, one copy of the Brief for Respondent in Opposition to Petition for Writ of Certiorari thereto in the above-entitled case were mailed, first class postage prepaid, to Hon. David M. Barron and Hon. John Anthony Palombi, Assistant Public Advocates, Department of Public Advocacy, 100 Fair Oaks Lane, Suite 301, Frankfort, Kentucky 40601, Counsel for Petitioner, Ralph Baze, et al. I further certify that all parties required by Rule 28 to be served have been served.

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APPENDIX

Ky.R.Crim.Proc 11.42 1

Ky. R. Civ.P. 76.44 2

Petitioners' CR 77.44 Motion to Stay Enforcement of Opinion Pending Application for a Writ of Certiorari filed in Baze and Bowling v. Rees, et al., Appeal No. 2005-SC-000543 on April 19, 2007 3

RCr 11.42 Motion to vacate, set aside or correct sentence

(1) A prisoner in custody under sentence or a defendant on probation, parole or conditional discharge who claims a right to be released on the ground that the sentence is subject to collateral attack may at any time proceed directly by motion in the court that imposed the sentence to vacate, set aside or correct it.

(2) The motion shall be signed and verified by the movant and shall state specifically the grounds on which the sentence is being challenged and the facts on which the movant relies in support of such grounds. Failure to comply with this section shall warrant a summary dismissal of the motion.

(3) The motion shall state all grounds for holding the sentence invalid of which the movant has knowledge. Final disposition of the motion shall conclude all issues that could reasonably have been presented in the same proceeding.

(4) The clerk of the court shall notify the attorney general and the Commonwealth's attorney in writing that such motion (whether it be styled a motion, petition or otherwise) has been filed, and the Commonwealth's attorney shall have 20 days after the date of mailing of notice by the clerk to the Commonwealth's attorney in which to serve an answer on the movant.

(5) Affirmative allegations contained in the answer shall be treated as controverted or avoided of record. If the answer raises a material issue of fact that cannot be determined on the face of the record the court shall grant a prompt hearing and, if the movant is without counsel of record and if financially unable to employ counsel, shall upon specific written request by the movant appoint counsel to represent the movant in the proceeding, including appeal.

(6) At the conclusion of the hearing or hearings, the court shall make findings determinative of the material issues of fact and enter a final order accordingly. If it appears that the movant is entitled to relief, the court shall vacate the judgment and discharge, resentence, or grant him or her a new trial, or correct the sentence as may be appropriate. A final order shall not be reversed or remanded because of the failure of the court to make a finding of fact on an issue essential to the order unless such failure is brought to the attention of the court by a written request for a finding on that issue or by a motion pursuant to Civil Rule 52.02.

(7) Either the movant or the Commonwealth may appeal from the final order or judgment of the trial court in a proceeding brought under this rule.

(8) The final order of the trial court on the motion shall not be effective until expiration of time for notice of appeal under RCr 12.04 and shall remain suspended until final disposition of an appeal duly taken and perfected.

(9) Original applications for relief of the nature described in this Rule 11.42 that are addressed directly to a court other than the one in which the sentence was imposed shall be transmitted to the court in which the sentence was imposed for further disposition in the manner above set forth.

(10) Any motion under this rule shall be filed within three years after the judgment becomes final, unless the motion alleges and the movant proves either:

(a) that the facts upon which the claim is predicated were unknown to the movant and could not have been ascertained by the exercise of due diligence; or

(b) that the fundamental constitutional right asserted was not established within the period provided for herein and has been held to apply retroactively.

If the judgment becomes final before the effective date of this rule, the time for filing the motion shall commence upon the effective date of this rule. If the motion qualifies under one of the foregoing exceptions to the three year time limit, the motion shall be filed within three years after the event establishing the exception occurred. Nothing in this section shall preclude the Commonwealth from relying upon the defense of laches to bar a motion upon the ground of unreasonable delay in filing when the delay has prejudiced the Commonwealth's opportunity to present relevant evidence to contradict or impeach the movant's evidence.

HISTORY: Amended by Order 98-3, eff. 3-1-99; prior amendments eff. 10-1-94 (Order 94-1), 1-1-86, 1-1-85, 9-1-81 (Order 81-5), 11-1-78, 1-1-78, 7-1-76, 9-1-70, 1-1-70, 1-1-65; adopted eff. 1-1-63

Supreme Court Commentary

1962:

RCr 11.42 supplements CR 60.02 and provides a post-conviction review procedure consistent with the trend of U.S. Supreme Court pronouncements. See Uniform Code Sec. 44. This rule and RCr 10.06 replace coram nobis.

Caveat: The provision for counsel's travel expenses cannot be given effect until such time as statutory authority for payment is enacted.

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CR 76.44 Stay pending review by United States Supreme Court

The taking of an appeal to the Supreme Court of the United States or the filing in that court of a petition for review on a writ of certiorari does not affect the finality of an opinion or final order. An order staying execution or enforcement of an opinion or final order may be entered upon motion under the following conditions and circumstances and for the periods designated:

(a) When an appeal is taken to the Supreme Court of the United States by the filing of a notice of appeal with the clerk of an appellate court as required by Rule 10 of the Rules of the Supreme Court of the United States and otherwise in accordance with Part IV of the Rules of that court, a stay during the pendency of the appeal may be granted on motion by any judge of the appellate court from which the appeal is taken, and shall be granted in appeals involving a sentence of death. The stay may be conditioned upon the giving of security to be fixed and approved by the judge that the appeal will be duly perfected and prosecuted as required by the Rules of the Supreme Court of the United States, and if the stay is to act as a supersedeas, a supersedeas bond shall be required in accordance with Rule 18 of the Rules of the Supreme Court of the United States. (Supreme Court Rules may be found in 28 U.S.C.A. Rules, Supreme Court); and

(b) When a party desires to make application for a writ of certiorari, a stay may be granted by any judge of the appellate court for such specified number of days not exceeding 90, as may reasonably be required to enable the writ to be obtained, and may be conditioned upon the giving of adequate security as specified in Title 28, Section 2101(f), U.S. Code.

HISTORY: Amended by Order 84-2, eff. 1-1-85; prior amendment eff. 7-1-81; adopted eff. 1-1-78

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IN THE SUPREME COURT
COMMONWEALTH OF KENTUCKY
No. 2005-SC-000543

RALPH BAZE,

and

THOMAS C. BOWLING,

Appellant,

v.

JOHN D. REES,
Commissioner,
KentuckyDepartment of Corrections,

GLENN HAEBERLIN,
Warden, Kentucky State
Penitentiary, Eddyville Kentucky,

and

ERNIE FLETCHER,
Governor of Kentucky,

Appellees

CR 76.44 MOTION TO STAY ENFORCEMENT OF OPINION PENDING APPLICATION FOR A WRIT OF CERTIORARI.

Ralph Baze and Thomas C. Bowling request that this Court stay enforcement of this Court's opinion affirming the judgment of the Franklin Circuit Court so they will have adequate time to file a petition for a writ of certiorari in the United States Supreme Court.

This Court's authority to stay enforcement of its opinion is found in CR 76.44, which allows any justice of this Court to stay enforcement of an opinion of this Court for

up to (and including) 90 days to enable a party to seek certiorari. CR 76.44(b).[1] Although a stay is discretionary in non-capital cases, this discretion does not exist when the case involves a death sentence. Rather, a stay "shall be granted in appeals involving a sentence of death." CR 76.44(a). Because this case involves the carrying out of Baze's and Bowling's death sentences, this mandatory provision of 76.44 applies.

This case was filed as a civil action seeking declaratory and injunctive relief. That, however, does not impact the application of CR 76.44. The only issues before this Court involved the constitutionality of the means for carrying out Baze's and Bowling's execution by lethal injection. Thus, the "sentence of death" was clearly at issue in this case.

Further, cases involving a sentence of death must be appealed directly to this Court. Ky. Const. §110(2)(b). By considering this case without requiring Baze and Bowling to first appeal to the Court of Appeals, this Court resolved any potential doubt about whether this case involves a "sentence of death." Thus, as was the case with case No. 2004-SC-000880, in which this Court stayed enforcement of the opinion even though the petition was in the context of a successive post conviction action,[2] under the plain language of CR 76.44(a), this Court is obligated to stay enforcement of this Court's opinion to allow time to seek certiorari.

Even if this Court was not obligated to stay enforcement of its opinion, this case is one of those cases where this Court should exercise its discretion to do so. The lethal injection trial that took place in this case was the first of its kind in the country. The issues presented were so important that the Franklin Circuit Court enjoined Bowling's

[1] The Petition for Rehearing was denied on April 19, 2007.
[2] The orders in 2004-SC-000880 and the online docket sheet are attached.

execution until a trial on the merits and a decision based on that trial could be rendered. Then, the Franklin Circuit Court continued that injunction for sixty days after the record on appeal was certified to this Court. When the briefing was filed, Appellees joined in the motion for oral argument. As each of these events exemplify, the issues presented in this case are important and caution has been taken to ensure that the rights of the parties are being upheld. This caution should continue for a short period of time to allow Baze and Bowling to seek certiorari, which will be the first case presented to the United States Supreme Court challenging the chemicals and procedures used in lethal injections that is based upon a fully developed record. In light of this, if this Court does not rule that it is required to stay enforcement of its opinion, this Court should exercise its discretion to do so.

90 days is necessary to allow Baze and Bowling adequate time to review this Court's detailed opinion and the pleadings filed in this Court and the court below. For example, there are more than 200 docket entries in this Court alone and seven days worth of trial to fully analyze. All of this must be done in a quick fashion to adequately present the issues to the United States Supreme Court in the time allotted by the United States Supreme Court for doing so.

For the reasons expressed above, Baze and Bowling request that this Court: 1) issue an order staying enforcement of its November 22, 2006 Order; and, 2) that the order remain in effect until the petition is filed or 90 days (whichever is shorter).

RESPECTFULLY SUBMITTED,

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April 19, 2007.

CERTIFICATE OF SERVICE

I hereby certify that on this date, I caused a true and correct copy of the foregoing

CR 76.44 MOTION TO STAY ENFORCEMENT OF OPINION PENDING APPLICATION FOR A WRIT OF CERTIORARI.

to be served VIA FIRST CLASS MAIL POSTAGE PREPAID AND FACSIMILE on the following individuals:

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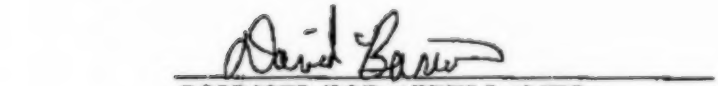

COUNSEL FOR APPELLANTS

April 19, 2007.

REPLY BRIEF

No. 07-5439

IN THE
SUPREME COURT OF THE UNITED STATES

RALPH BAZE, ET AL.,

Petitioner

v.

JOHN D. REES, ET AL.,

Respondent

ON PETITION FOR A WRIT OF CERTIORARI TO THE SUPREME COURT OF KENTUCKY

PETITIONERS' REPLY TO BRIEF IN OPPOSITION

CAPITAL CASE

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August 21, 2007

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I. THE PETITION FOR A WRIT OF CERTIORARI PRESENTS A SUBSTANTIAL AND RECURRING CONSTITUTIONAL ISSUE THAT HAS DIVIDED THE COURTS AND FOR WHICH GUIDANCE FROM THIS COURT WOULD SUBSTANTIALLY ASSIST THE LOWER COURT'S IN DETERMINING HOW TO CONSISTENTLY APPLY THE EIGHTH AMENDMENT CRUEL AND UNUSUAL PUNISHMENT CLAUSE TO METHOD OF EXECUTION CLAIMS.

Respondents' statement that this case presents no unique issues of law that merit granting certiorari is disingenuous. Shortly after the Kentucky Supreme Court rendered its decision in this case, counsel of record for Respondents went on national television to discuss the lethal injection issue and the Kentucky litigation in particular. During that television interview, counsel of record for Respondents, Jeff Middendorf, was asked if he considers whether lethal injection can be administered in a reliable, consistent way to be a "fundamental question." He responded, "Well, certainly." Exhibit A (Transcript of PBS Newshour: Debate –Lethal Injection Suspended, December 19, 2006).

The debate later turned to the likelihood and need for this Court to get involved. Counsel of record for Respondents was asked if he thought it was likely that this case would end up being decided by the United States Supreme Court. He responded, "Well, it certainly could end up there." *Id.* Then, at the end of the interview, in reference to this Court addressing the issue, he stated, "I think eventually the Supreme Court – this is a constitutional issue that affects the whole country - - they may well step in." *Id.*[1] While counsel of record for Respondents suggests that this case is unimportant now that it is convenient for him to do so, his original statement on national television that this issue needs to be resolved by this Court, and that this issue is likely to be resolved by this Court is the more accurate reflection of the importance of the issues

[1] The transcript reflects that this last statement was made by Richard Dieter. Crediting the statement to Dieter was a typographical error. The question itself was posed to Jeff Middendorf and the video feed of the debate shows Middendorf making this statement.

presented in this petition for a writ of certiorari. And, this case is the perfect case for this Court to settle the important constitutional issues now before this Court that have divided the lower courts.

As stated in the petition for a writ of certiorari, this case is based on a fully developed record and does not involve the precursor issue of whether a stay of execution is necessary to reach the merits. Further, because there is no dispute in the trial record that readily available alternative chemicals could be used that pose less risk of pain and suffering, whether the Eighth Amendment is violated solely upon a finding that the risk is "unnecessary" is dispositive of the outcome.

Rather than admit the importance of this Court resolving this issue, Respondents state that the Kentucky Supreme Court applied the correct legal standard of a "substantial risk" and that no court has yet to find lethal injection unconstitutional. While it is true that no court has reached a final decision striking down lethal injection, neither of these arguments are relevant to the questions presented and are best reserved for a merits brief. The issue currently before this Court is whether this Court should take the case to decide the appropriate legal standard. In that regard, there can be no dispute that "substantial" and "unnecessary" are words with materially different meanings that could change the outcome of case. Thus, regardless of the correctness of the state court decision, this Court should take this case, as counsel of record for Respondent stated on national television, to determine the appropriate legal standard to apply to this type of lawsuit.

As laid out in the petition, courts across the country (both state and federal) have applied different legal standards and struggled to determine the appropriate legal standard. Regardless of the outcome, this remains the same and is a basis for this Court granting certiorari. There can be

no rebuttal of the fact that the number of lethal injection cases percolating throughout the country is enormous and that this Court has yet to address the appropriate Eighth Amendment legal standard to apply to this type of action. Indeed, the strength of this as a reason to grant certiorari is so high that Respondents fail to address it or even acknowledge it, instead focusing on misleading statements about the posture of the cases and the legal standard that has been applied.

Respondents take issue with the cases cited by Petitioners, claiming that the cases all involve interlocutory trial court rulings on preliminary injunction motions. *Brief in Opposition* at 6-7. This is also inaccurate. Many of the cases, including *Webb* and *Abdur'Rahman*, did not involve rulings on preliminary injunctions. Regardless, Respondents' argument is curious at best since two of the three cases it relies upon as a basis to deny certiorari also were decided in the context of interlocutory rulings on preliminary injunction motions (*Workman* and *Jones*).[2] Contrary to Respondents' argument, this shows the importance of taking this case because it is one of the few cases that has arisen before this Court on a fully developed record outside the auspices of the law governing injunctions or stays of executions and the expedited decisions that such a situation requires. In short, if this Court is going to resolve the issues presented in the petition for certiorari, now is the time and this petition for certiorari is the most appropriate vehicle to do so.

II. BECAUSE THE STATE COURT ADDRESSED PETITIONERS' CLAIMS ON THE MERITS WITHOUT RELYING ON ANY DEFAULT DOCTRINE, THE PROCEDURAL DEFAULT DOCTRINE IS INAPPLICABLE.

Respondents' argument that Petitioners' claims are procedurally defaulted demonstrates an utter lack of understanding of the doctrine of procedural default, and must fail for three reasons: 1) the state court never found the claim waived or defaulted, so procedural default

[2] The other case, *Taylor*, will likely arrive before this Court in the near future.

cannot apply; 2) Respondent has waived the affirmative defense of procedural default; and, 3) Petitioners' claim does not challenge the sentence of death itself; instead, it challenges only particular aspects of the means and procedures for carrying out that sentence, which this Court has recognized is cognizable in a civil action. *See*, *Hill v. McDonough*, 126 S.Ct. 2096 (2006).

The purpose of the procedural default doctrine is "to avoid the unnecessary friction between the federal and state court systems that would result if a [] federal court upset a state court conviction without first giving the state court system an opportunity to correct its own errors." *Preiser v. Rodriguez*, 411 U.S. 475, 490 (1973). To that end, federal courts are barred from reviewing "a question of federal law decided by a state court if the decision of that court rests on a state law ground that is independent of the federal question and adequate to support the judgment." *Lambrix v. Singletary*, 520 U.S. 518, 522-23 (1997) (*quoting*, *Coleman v. Thompson*, 501 U.S. 722, 729 (1991)). Procedural default bars review only when "the last state court rendering a judgment in the case clearly and expressly states that its judgment rests on a state procedural bar." *Harris v. Reed*, 489 U.S. 255, 263 (1989). Where a claim was addressed on the merits without any reference to a default, the doctrine of procedural default does not apply. *See*, *County Court of Ulster County, New York v. Allen*, 442 U.S. 140, 149 (1979). That is the case here.

The Kentucky Supreme Court, the last state court to issue a judgment in this case, never mentioned waiver, default, or jurisdiction as a potential defense to this cause of action. Indeed, the court implicitly rejected such an affirmative defense, which had not been raised by Respondents, when the court said "[t]his action was filed in accordance with CR 57, which outlines the procedure for obtaining a declaratory judgment." *Baze, et al. v. Rees, et al.*, 217 S.W.3d 207, 209 (Ky. 2006). Then, in upholding the trial court's judgment rendered after a

seven day trial, the court held, "[t]he lethal injection method used in Kentucky is not a violation of the Eighth Amendment to the United States Constitution or Section 17 of the Kentucky Constitution's ban on cruel and unusual punishment. Baze and Bowling have not met their burden of proof by a preponderance of the evidence as necessary in a declaratory judgment action. The findings of fact by the trial judge are not clearly erroneous. The conclusions of law are correct." *Id.* at 212-13. This language makes it clear that the Kentucky Supreme Court addressed the claim on the merits without applying a procedural bar, thereby leaving nothing for which the procedural default doctrine could apply.

Further, Respondents have waived any argument concerning procedural default by failing to raise it to the state court. They neither raised it in response to the CR 76.44 motion referenced in the Brief in Opposition nor in the appellate brief they filed in the Kentucky Supreme Court. *See* Appendix B (Response to CR 76.44 Motion); Appendix C (Appellees' Brief in the Kentucky Supreme Court). By failing to raise the affirmative defense of waiver or procedural default in state court, Respondents have waived all potential application of the defense. *See, e.g., Trest v. Cain*, 522 U.S. 87, 90-91 (1997).

Finally, neither the filing of a CR 76.44 motion in state court nor anything said within that motion makes this Petition a successive habeas petition. As both the trial court and Kentucky Supreme Court ruled, this case was properly brought as a civil action under the applicable law and thus was cognizable as a civil action. The fact that the Kentucky Supreme Court then applied CR 76.44 to that action does not mean that the state court suddenly changed its mind and ruled that the action was not a civil action, but instead means that the Kentucky Supreme Court recognized that CR 76.44 is applicable to a civil action challenging particular aspects of a lethal injection procedure.

CR 76.44 deals with stays of execution pending the filing of a petition for a writ of certiorari in this Court. In relevant part, the rule says a stay "shall be granted in appeals involving a sentence of death." CR 76.44(a). The rule does not define "involving." But, state law looks to the plain meaning of words when interpreting a rule. *Cf.*, *Stopher v. Conliffe*, 170 S.W.3d 307, 308-09 (Ky. 2005) (discussing the application of the plain meaning doctrine when interpreting a statute). Include is defined in Merriam Webster's Collegiate Dictionary, 10th ed. as: 1) "to take in or comprise as a part of a whole"; 2) "to contain between or within." Any action involving portions of a lethal injection protocol surely fall within this definition of include for if not for a sentence of death, Petitioners would not have standing to challenge part of the lethal injection protocol. Thus, this petition "involves" a sentence of death in the obvious sense that Petitioners will be executed, but that does not mean that they are challenging the sentence on its face.

As this Court ruled in *Hill v. McDonough*, the key factor in determining whether a lethal injection challenge falls outside the realm of a civil action is whether the nature of the challenge "necessarily implies] the invalidity of the confinement of the sentence." 126 S.Ct. at 2103. Just as in *Hill*, Petitioners' action does not imply the invalidity of their death sentence for, as the state court recognized, Petitioners could be executed by lethal injection regardless of the outcome of this suit. The arguments presented to this Court in the petition for a writ of a certiorari are no different in this regard. Petitioners raise an argument concerning the appropriate legal standard for determining whether the chemicals and procedures Respondents intend to use to execute them violate the Eighth Amendment to the United States Constitution and argue that Respondents will deprive them of due process by not using the proper equipment to maintain life if a stay of execution is granted after the first or second lethal injection chemicals are injected.

As Petitioners pointed out throughout the litigation in this case, these claims can easily be resolved by Respondents obtaining the proper equipment and training and by changing the chemicals they inject. Because neither the current chemicals nor the current procedures are required by state law, *see* K.R.S. 431.220, Petitioners' claims do not necessarily imply the invalidity of their death sentences. Thus, Petitioners' claims are cognizable in a civil action (as the state courts already ruled) and are cognizable before this Court.

In sum, Petitioners have not procedurally defaulted their claim, Respondents have waived any procedural default defense, and this action is cognizable as a civil action. Thus, the petition for a writ of certiorari is properly before this Court on the merits.

CONCLUSION

For the reasons stated above, as well as those stated in the main petition, Petitioners respectfully request that a writ of certiorari be granted to review the judgment of the Kentucky Supreme Court.

Dated: August 21, 2007.

Respectfully submitted,

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AMICUS CURIAE BRIEF

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No. 07-5439

FILED
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SUPREME COURT, U.S.

In the Supreme Court of the United States

RALPH BAZE AND THOMAS C. BOWLING, PETITIONERS

v.

JOHN D. REES, COMMISSIONER,
KENTUCKY DEPARTMENT OF CORRECTIONS, ET AL.
(CAPITAL CASE)

ON WRIT OF CERTIORARI
TO THE SUPREME COURT OF KENTUCKY

BRIEF FOR THE UNITED STATES
AS AMICUS CURIAE SUPPORTING RESPONDENTS

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QUESTION PRESENTED

Like the federal government and the vast majority of States that have the death penalty, Kentucky conducts executions of individuals convicted of capital offenses and sentenced to death by means of lethal injection: specifically, by administering a series of three drugs that is intended to cause death in a painless and expeditious manner. The question presented is as follows:

Whether Kentucky's method of execution constitutes cruel and unusual punishment under the Eighth Amendment, based solely on the risk that the drugs involved will cause pain if improperly administered.

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Stuart Banner, *The Death Penalty: An American History* (2002) 2, 15

James A. Bayard, Jr., *A Brief Exposition of the Constitution of the United States* (2d ed. 1840) 12

Dave Turk, U.S. Marshals Service, *Historical Federal Executions* (visited Dec. 10, 2007) <www.usmarshals.gov/history/executions.htm> 3

In the Supreme Court of the United States

No. 07-5439

RALPH BAZE AND THOMAS C. BOWLING, PETITIONERS

v.

JOHN D. REES, COMMISSIONER,
KENTUCKY DEPARTMENT OF CORRECTIONS, ET AL.

(CAPITAL CASE)

ON WRIT OF CERTIORARI
TO THE SUPREME COURT OF KENTUCKY

BRIEF FOR THE UNITED STATES AS AMICUS CURIAE SUPPORTING RESPONDENTS

INTEREST OF THE UNITED STATES

This case involves a challenge to the constitutionality of Kentucky's method of execution—lethal injection—based solely on the risk that the drugs involved will cause pain if improperly administered. Federal law authorizes capital punishment for a variety of offenses and provides that federal death sentences shall be implemented in the manner prescribed by the pertinent State's own law. In conducting executions by lethal injection, the federal government administers the same series of three drugs as Kentucky. Several federal prisoners who have been sentenced to death are currently pursuing similar method-of-execution claims to the instant claim. See *Robinson* v. *Mukasey*, No. 1:07-cv-

02145 (D.D.C.); *Roane* v. *Mukasey*, No. 1:05-cv-02337 (D.D.C.). The United States therefore has a substantial interest in this case.

STATEMENT

A. Background

1. The use of capital punishment in America dates virtually from the foundation of the first colony. Capital punishment was sanctioned in all of the colonies; the predominant method of execution was hanging, but burning, disemboweling, and dismembering were used in exceptional cases. Following the adoption of the Constitution, hanging was used in virtually all executions. In 1889, New York, after looking for a more humane option, switched to electrocution; other States followed suit, based on the "well grounded belief that electrocution is less painful and more humane than hanging." *Malloy* v. *South Carolina*, 237 U.S. 180, 185 (1915). For much of the 20th century, electrocution was the predominant method of execution in the United States; some States adopted lethal gas, and a few States continued to use hanging or a firing squad. See Stuart Banner, *The Death Penalty: An American History* 6-9, 70-80, 169-170, 189, 199, 202-203 (2002) (Banner).

After this Court affirmed the constitutionality of capital punishment in *Gregg* v. *Georgia*, 428 U.S. 153 (1976), there was increasing concern that electrocution might not in fact cause death in a painless or expeditious manner. See Banner 297. In 1977, legislators in Oklahoma who shared that concern, after consulting with the chair of the anesthesiology department at the University of Oklahoma College of Medicine, proposed a bill adopting lethal injection as the State's method of execution. See *Beardslee* v. *Woodford*, 395 F.3d 1064, 1073 (9th Cir.),

cert. denied, 543 U.S. 1096 (2005). The Oklahoma Legislature enacted that bill, and other States subsequently switched to lethal injection as well. Lethal injection is now the sole or primary method of execution in 37 of the 38 States that authorize capital punishment. See *Beardslee*, 395 F.3d at 1072 & n.8.

Of the 37 States that conduct executions by means of lethal injection, the vast majority—at least 29—do so by administering the same series of three drugs originally devised by the Oklahoma Department of Corrections. See *Workman* v. *Bredesen*, 486 F.3d 896, 907 (6th Cir.), cert. denied, 127 S. Ct. 2160 (2007). The first drug is sodium thiopental (or sodium pentothal), a fast-acting barbiturate that anesthetizes the subject within 60 seconds. J.A. 762-763, 806. The second is pancuronium bromide, a neuromuscular paralytic that prevents bodily movement and ultimately halts respiration. *Ibid.* The third is potassium chloride, an agent that induces cardiac arrest. *Ibid.* While jurisdictions administer the three drugs in somewhat different dosages, it is undisputed that, if properly administered, the massive dose of sodium thiopental that is typically given—ten times the amount used in a typical surgical procedure—would anesthetize the subject for hours, such that the administration of the other two drugs would be painless. J.A. 541; see Resp. Br. 37-38, 49. It is also undisputed that, if properly administered, the dose of each drug that is typically given would ordinarily be sufficient to induce death on its own. J.A. 547; see, *e.g.*, *Workman*, 486 F.3d at 902.

2. Like the States, the federal government has conducted executions since the Nation's founding. See Dave Turk, U.S. Marshals Service, *Historical Federal Executions* (visited Dec. 10, 2007) <www.usmarshals.

gov/history/executions.htm>. The statute that currently governs federal executions is the Federal Death Penalty Act of 1994 (FDPA), 18 U.S.C. 3591 *et seq.* The FDPA specifically provides that federal death sentences shall be "implement[ed] * * * in the manner prescribed by the law of the State in which the sentence is imposed," or, if the sentencing State does not authorize capital punishment, in the manner prescribed by a State designated by the sentencing court. 18 U.S.C. 3596(a). Since the FDPA's enactment, the federal government has executed three individuals, all by lethal injection; 48 other individuals are currently awaiting execution in the federal system.

The Federal Bureau of Prisons (BOP) conducts executions at the United States Penitentiary in Terre Haute, Indiana. The BOP has developed a uniform written protocol for carrying out executions where the relevant State prescribes lethal injection as the manner of execution. See App., *infra*, 1a-6a. That protocol provides that the subject should be executed using 5 grams of sodium thiopental, 240 milligrams of pancuronium bromide, and 240 milliequivalents of potassium chloride. *Id.* at 3a-4a. It further specifies that the series of drugs should be administered intravenously, preferably by means of a femoral vein; if peripheral veins are to be used, the protocol requires that a backup line be established, for use in the event that the primary line fails. *Id.* at 3a. "Qualified personnel" are responsible for preparing the series of drugs, establishing intravenous access, and controlling the flow of the drugs; the protocol defines "qualified personnel" as individuals who have "necessary training or experience in the function they will perform in implementing the federal death sentence." *Id.* at 2a-5a. Qualified personnel are expressly

required to monitor the consciousness of the subject; they are permitted to administer the last two drugs in the series only after determining that the subject has been rendered unconscious by the dose of sodium thiopental. *Id.* at 5a-6a.

B. Facts And Proceedings Below

1. Around 7 a.m. on April 9, 1990, Eddie and Tina Earley and their two-year-old son, Christopher, were sitting in their car in Lexington, Kentucky, outside Earley Bird Cleaners, a dry-cleaning business that they owned. Petitioner Bowling crashed his car into the Earleys' car. Bowling got out of his car, drew a gun, and fired indiscriminately into the Earleys' car, killing Eddie and Tina Earley and wounding Christopher. After going over and looking at the victims, Bowling got back in his car and drove away. See *Bowling* v. *Commonwealth*, 873 S.W.2d 175, 176-177 (Ky. 1993), cert. denied, 513 U.S. 862 (1994).

On January 30, 1992, Powell County, Kentucky, Sheriff Steve Bennett and Deputy Sheriff Arthur Briscoe went to petitioner Baze's cabin in order to arrest him on multiple fugitive warrants. Baze was hiding in the brush with an assault rifle. As his wife distracted the officers, Baze shot Sheriff Bennett three times in the back, killing him. When Deputy Briscoe attempted to flee, Baze shot him twice in the back; Baze then walked up to Deputy Briscoe, punched him with the muzzle of his gun, and shot him a third time in the head, killing him. See *Baze* v. *Commonwealth*, 965 S.W.2d 817, 819-820 (Ky. 1997), cert. denied, 523 U.S. 1083 (1998).

Petitioners were each convicted in Kentucky state court of two counts of capital murder and sentenced to

death. They have exhausted their direct appeals and federal and state collateral remedies.

2. In 1998, Kentucky adopted lethal injection as its default method of execution. See Ky. Rev. Stat. Ann. § 431.220(1) (LexisNexis 1999). Kentucky uses the same series of three drugs as the federal government and the majority of other States; Kentucky's protocol provides that the subject should be executed using 3 grams of sodium thiopental, 50 milligrams of pancuronium bromide, and 240 milliequivalents of potassium chloride. J.A. 806, 978-979. The protocol provides that qualified personnel are responsible for preparing the series of drugs, establishing intravenous access, and controlling the flow of the drugs; Kentucky uses a phlebotomist and an emergency medical technician to perform those tasks. J.A. 273-274, 516-517, 761-762, 975-976, 984, 987.

3. In 2004, petitioners filed a civil action against respondents, three state officials, in Kentucky state court, contending that Kentucky's method of execution constituted cruel and unusual punishment under the Eighth Amendment. J.A. 9-50. After a seven-day bench trial with some 20 witnesses, the trial court ruled in favor of respondents in relevant part. J.A. 754-769. After making various factual findings concerning Kentucky's method of execution, the trial court concluded that petitioners had failed to show that the method would "inflict[] unnecessary physical pain upon the condemned." J.A. 766.

4. The Kentucky Supreme Court unanimously affirmed. J.A. 798-809. The court explained that "[a] method of execution is considered to be cruel and unusual punishment under the Federal Constitution when the procedure for execution creates a substantial risk of wanton and unnecessary infliction of pain, torture or

lingering death." J.A. 800 (citation omitted). While the court acknowledged that "[c]onflicting medical testimony prevents us from stating categorically that a prisoner feels no pain," it noted that the individual whom Kentucky had previously executed by lethal injection "went to sleep within 15 seconds to one minute from the moment that the warden began the execution and never moved or exhibited any pain whatsoever subsequent to losing consciousness." *Ibid.* The court affirmed the trial court's findings and held that "[t]he lethal injection method used in Kentucky is not a violation of the Eighth Amendment." *Ibid.*

SUMMARY OF ARGUMENT

In *Gregg*, this Court reaffirmed that capital punishment is constitutional; in doing so, members of this Court explained that "a heavy burden rests on those who would attack the judgment of the representatives of the people" as to how that punishment should be applied and implemented. 428 U.S. at 175 (joint opinion of Stewart, Powell, and Stevens, JJ.). It necessarily follows that there must be some feasible method by which a sentence of death may be executed—and that such a sentence may be imposed and carried out without a never-ending series of demands that a *more* humane method exists.

This Court has never held that a method of execution violates the Eighth Amendment. To the contrary, the Court has rejected challenges to executions by firing squad and electrocution and, at the same time, made clear that jurisdictions are not required to use the "best" available method of execution: *i.e.*, the method that is believed to cause the least amount of pain when compared to other methods. Such a standard would impose an impossible burden on the federal government

and the States and would, at a minimum, be a recipe for judicial micromanagement of execution procedures, including the medical and scientific details of those procedures.

Instead, this Court's method-of-execution cases suggest that the Eighth Amendment would prohibit a method of execution only if it would inflict a considerably greater degree of pain than a feasible alternative method. And where, as here, an individual is claiming that a particular method of execution is invalid because there is a *risk* that it would inflict an excessive degree of pain, the claimant must show, at a minimum, that there is a *substantial* risk—not merely a marginal or hypothetical one—that the challenged method would inflict a significantly greater degree of pain than a feasible alternative method. A contrary rule would turn upside down the presumption in favor of the methods selected by democratically elected legislatures; contravene this Court's cases recognizing that the Eighth Amendment does not protect against accidents, inadvertent failures, or unproven risks; and greatly undermine society's interest in seeing that executions are carried out in a timely manner. The claimant must also show that, in implementing the method of execution at issue, government officials are acting with deliberate indifference to a demonstrated risk posed by that method—not merely that officials failed to take every conceivable precaution to mitigate that risk.

Petitioners cannot satisfy either the objective or the subjective prong of that Eighth Amendment standard. With regard to the objective prong, the risk identified by petitioners—*i.e.*, that the drugs used in their executions will be improperly administered, resulting in excessive pain—is simply too speculative to be constitu-

tionally significant. While some risk of pain is inherent in *any* method of capital punishment, the risk of pain from lethal injection has not been shown to be any greater as a quantifiable matter than the risk of pain from other methods of execution accepted by this Court, including electrocution and hanging. It would be anomalous for the Court to hold that this method of capital punishment—compared to, say, electrocution, see *Louisiana ex rel. Francis* v. *Resweber*, 329 U.S. 459 (1947)—imposes a constitutionally unacceptable risk of pain and suffering.

Any risk of pain inherent in lethal injection is manifestly "one that today's society chooses to tolerate." *Helling* v. *McKinney*, 509 U.S. 25, 36 (1993). The vast majority of jurisdictions that authorize capital punishment use the same series of three drugs as Kentucky, and the anecdotal evidence from other jurisdictions cited by petitioners falls fall short of establishing that Kentucky's method of execution gives rise to a substantial risk of excessive pain. Nor do petitioners identify any features of Kentucky's method that substantially increase the risk of pain during their executions. Each of the alternative methods that petitioners propose, moreover, has its own disadvantages, and the Constitution ultimately vests in legislatures, not the courts, the discretion to choose between different methods of execution within a constitutionally permissible range.

Finally, while the Constitution protects against officials who are deliberately indifferent to a constitutionally significant risk of pain, petitioners have failed to show that respondents are acting with anything close to deliberate indifference. Indeed, the whole point of the lethal-injection procedure is to *avoid* the needless infliction of pain and to hasten death. The evidence indicates,

moreover, that respondents, like other federal and state officials, have gone to great lengths to minimize the risk of error and to avoid inflicting excessive pain during executions. Indeed, Kentucky, like the federal government and other States, has reviewed and modified its execution protocol in an effort further to alleviate any risk of pain. The Kentucky Supreme Court therefore correctly rejected petitioners' Eighth Amendment claim.

ARGUMENT

KENTUCKY'S METHOD OF EXECUTION DOES NOT VIOLATE THE EIGHTH AMENDMENT

The Eighth Amendment to the Constitution provides that "[e]xcessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted." It does not constitute cruel and unusual punishment to execute an individual by administering the series of three drugs used by Kentucky, the federal government, and the vast majority of other States that sanction capital punishment. That series of drugs is intended to cause death in a painless and expeditious manner, and petitioners have failed to show that there is a substantial risk that Kentucky's method of execution would inflict a significantly greater degree of pain than any feasible alternative method. The judgment of the Kentucky Supreme Court should therefore be affirmed.

A. Because Capital Punishment Is Constitutional, There Must Be A Feasible Method By Which A Sentence Of Death May Be Executed

The starting point for any analysis of petitioners' Eighth Amendment claim is that capital punishment is itself constitutional. It is constitutional not only in the sense that the Court's cases have upheld the death pen-

alty, see, *e.g.*, *Gregg*, *supra*, but also in the sense that the Constitution expressly contemplates capital punishment. The Fifth Amendment "contemplate[s] the continued existence of the capital sanction by imposing certain limits on the prosecution of capital cases." *Gregg*, 428 U.S. at 177 (joint opinion). The Grand Jury Clause of the Fifth Amendment guarantees that "[n]o person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury." The Double Jeopardy Clause similarly contemplates jeopardy, but not double jeopardy, of "life or limb." And the Due Process Clause permits "deprivation" of "life," but only through "due process of law." Moreover, the Due Process Clause of the Fourteenth Amendment, adopted more than 75 years later, likewise presumes the existence of the death penalty. And to the extent that the Eighth Amendment "draw[s] its meaning from the evolving standards of decency that mark the progress of a maturing society," *Trop* v. *Dulles*, 356 U.S. 86, 101 (1958) (plurality opinion), it was true at the time of *Gregg*, and remains true today, that "a large proportion of American society * * * regard[s] [death] as an appropriate and necessary criminal sanction." *Gregg*, 428 U.S. at 179 (joint opinion).

The necessary corollary of the proposition that capital punishment is constitutional is that there must be some feasible method by which a sentence of death may be carried out, even though it will always be possible to argue that a more "pain-free" method exists. Were it otherwise, the result would be to render capital punishment constitutional in theory, but unconstitutional in practice. Petitioners in this case do not contend that there is no valid feasible method of execution, but instead contend that Kentucky's method of execution gives

rise to an unacceptable risk of pain when compared to alternative methods that they identify. The central question in this case is the applicable legal standard for an Eighth Amendment claim of that variety.

B. The Eighth Amendment Prohibits The Use Of A Method Of Execution When There Is A Substantial Risk That The Method Would Inflict A Significantly Greater Degree Of Pain Than A Feasible Alternative Method And Officials Act With Deliberate Indifference To That Risk

1. In prescribing "cruel and unusual punishments," the Framers of the Constitution "were primarily concerned * * * with proscribing 'tortures' and other 'barbarous' methods of punishment." *Gregg*, 428 U.S. at 170 (joint opinion); see *Estelle* v. *Gamble*, 429 U.S. 97, 102 (1976). While there was little discussion of the Eighth Amendment in the debates concerning the Bill of Rights itself, the views of early commentators confirm that the relevant language was intended to prohibit methods of punishment that deliberately inflicted excessive amounts of pain, such as the rack or the stake. See, *e.g.*, James A. Bayard, Jr., *A Brief Exposition of the Constitution of the United States* 154 (2d ed. 1840).

2. This Court has considered claims that a method of execution violates the Eighth Amendment in three cases, but has never held a method invalid.

a. In *Wilkerson* v. *Utah*, 99 U.S. 130 (1878), an individual convicted of murder in territorial court challenged his sentence to death by firing squad. *Id.* at 136. The Court held that the sentence would not constitute cruel and unusual punishment. *Id.* at 133. The Court stated that "[d]ifficulty would attend the effort to define with exactness the extent of the constitutional provision which provides that cruel and unusual punishments shall

not be inflicted; but it is safe to affirm that punishments of torture, * * * and all others in the same line of unnecessary cruelty, are forbidden by that amendment." *Id.* at 135-136. The Court cited cases from England in which "other circumstances of terror, pain, or disgrace" were "superadded" to the act of execution. *Id.* at 135. By contrast, the Court noted, the firing squad was routinely used as a method of execution for military offenses, see *id.* at 133-135, and "[o]ther modes besides hanging were sometimes resorted to at common law," *id.* at 137.

b. *In re Kemmler*, 136 U.S. 436 (1889), involved the first execution by electrocution in New York. The defendant argued that his execution would constitute cruel and unusual punishment (and that the Eighth Amendment should be incorporated against the States). *Id.* at 447-448. The Court ultimately rejected the incorporation argument. *Id.* at 449. The Court noted, however, that under the Eighth Amendment, "[p]unishments are cruel when they involve torture or a lingering death." *Id.* at 447. The Court reasoned that "the punishment of death is not cruel, within the meaning of that word as used in the Constitution"; instead, the word "cruel" "implies * * * something inhuman and barbarous, something more than the mere extinguishment of life." *Ibid.* The Court also noted that New York had a counterpart to the Eighth Amendment in its *state* constitution, and observed that the state courts had held that execution by electrocution would not constitute cruel and unusual punishment under that provision, on the grounds that "th[e] act [adopting electrocution] was passed in the effort to devise a more humane method of reaching the result" and that "upon the evidence the legislature had attained * * * the object [it] had in view in [the act's]

passage." *Ibid.* The Court reasoned that, if it were to treat the state courts' holding as "involving an adjudication that the statute was not repugnant to the Federal Constitution," that holding would be "plainly right." *Ibid.*

c. Finally, in *Resweber*, an individual whose execution by electrocution had failed because of a mechanical malfunction contended that Louisiana's subsequent effort to execute him would constitute cruel and unusual punishment (and that the Eighth Amendment should be incorporated against the States). 329 U.S. at 461 (plurality opinion). A plurality of the Court concluded that, while the Fourteenth Amendment "would prohibit by its due process clause execution by a state in a cruel manner," the instant execution would not violate the Eighth Amendment. *Id.* at 463. The plurality reasoned that the Eighth Amendment "[p]rohibit[s] * * * the wanton infliction of pain," but that "[t]he cruelty against which the Constitution protects a convicted man is * * * not the necessary suffering involved in any method employed to extinguish life humanely." *Id.* at 463-464. Applying that standard, the plurality determined that "[t]he fact that an unforeseeable accident prevented the prompt consummation of the sentence cannot * * * add an element of cruelty to a subsequent execution," on the ground that "[t]here is no purpose to inflict unnecessary pain nor any unnecessary pain involved in the proposed execution." *Id.* at 464.

Justice Frankfurter concurred in the judgment. *Resweber*, 329 U.S. at 466-472. While he suggested that "a hypothetical situation, which assumes a series of abortive attempts at electrocution or even a single, cruelly willful attempt, would * * * raise different ques-

tions," he concluded that it would not violate due process to carry out the instant execution. *Id.* at 471.

3. As the foregoing discussion demonstrates, there is no support, either in the history of the Eighth Amendment or in this Court's cases interpreting it, for the proposition that States and the federal government may use only one method of execution: *viz.*, the method that is believed to cause the least amount of pain when compared to other methods. Such a proposition also is belied by the fact that, throughout the Nation's history, multiple methods of execution have been in use at any given time. For example, while hanging was the predominant method of execution at the time of the framing, there appears to have been considerable variation in how executions by hanging were carried out—and, at least for military offenses, the firing squad was also used. See Banner 44-48. During much of the 20th century, moreover, jurisdictions simultaneously used as many as four different methods of execution: electrocution, lethal gas, hanging, and the firing squad. See p. 2, *supra*.

If the Eighth Amendment mandated the use of only the "best" available method of execution, as petitioners' "unnecessary risk" standard seemingly (or effectively) contemplates, jurisdictions presumably would be required to choose between an old and new method of execution as soon as each new method became available—and, within the constitutionally mandated "method" of execution, to employ the optimal variation of that method. Cf. J.A. 31 (alleging, in complaint, that the needle used in Kentucky executions is "too large"). And as society progresses, courts would become increasingly enmeshed in reviewing (and second-guessing) the medical and scientific judgments underlying accepted

execution methods. Cf. *Marshall* v. *United States*, 414 U.S. 417, 427 (1974) (noting that, "[w]hen Congress undertakes to act in areas fraught with medical and scientific uncertainties, legislative options must be especially broad and courts should be cautious not to rewrite legislation"). Indeed, much of the debate in this case centers on the appropriate type (and dosage) of drugs used in lethal injection—hardly a matter of institutional expertise for the judiciary.

Putting aside how more humane methods of execution could emerge in a regime in which the constitutional mandate of uniformity precluded innovation in the States, the Eighth Amendment does not envision such micromanagement of execution procedures (or give courts adequate tools for the task). See, *e.g.*, *Gregg*, 428 U.S. at 175 (joint opinion) (noting that "[w]e may not require the legislature to select the least severe penalty possible so long as the penalty selected is not cruelly inhumane or disproportionate to the crime involved" and that "a heavy burden rests on those who would attack the judgment of the representatives of the people"). Instead, the better reading of the Eighth Amendment—as reflected by this Court's repeated references to "torturous" or "barbarous" punishments—is that a method of execution is unconstitutional only where it would inflict a *considerably* greater amount of pain when compared to another method. See, *e.g.*, *Resweber*, 329 U.S. at 464 (plurality opinion).

While this Court has suggested that the Eighth Amendment inquiry is a comparative one, it has not explicitly specified the baseline against which the challenged method should be measured. The most straightforward approach would be to compare the challenged method with the methods that were viewed as permissi-

ble (or impermissible) when the Eighth Amendment was promulgated. Such an approach would not merely "prevent * * * an exact repetition of history," but would proscribe comparably cruel methods of execution that did not exist at the time of the framing. *Weems* v. *United States*, 217 U.S. 349, 373 (1910).

Another approach—and one suggested by the "evolving standards of decency" methodology of Eighth Amendment interpretation—would be to measure the challenged method of execution against a currently available alternative, and to assess whether the challenged method would inflict a considerably greater degree of pain than the alternative. Under such a standard, a previously permissible method could conceivably be rendered unconstitutional by the development of a better alternative. At the same time, such a standard would afford legislatures at least some leeway in selecting methods of their choosing and would account for the fact that it will invariably be possible for an individual to point to some alternative method or subsequent development suggesting that an existing method is not optimal. Cf. *Gregg*, 428 U.S. at 176 (joint opinion) (noting that "the deference we owe to the decisions of the state legislatures under our federal system is enhanced where the specification of punishments is concerned, for these are peculiarly questions of legislative policy") (internal quotation marks and citations omitted).

Under such an approach, one highly relevant consideration is "the legislation enacted by the country's legislatures," which this Court has described as "the clearest and most reliable objective evidence of contemporary values." *Atkins* v. *Virginia*, 536 U.S. 304, 312 (2002) (citation omitted). The Court has looked to the practices of the States and the federal government in invalidating

the execution of mentally retarded offenders, see *id.* at 313-317, and juvenile offenders, see *Roper* v. *Simmons*, 543 U.S. 551, 564-567 (2005). Where a majority (or, as here, a vast majority) of jurisdictions use a particular method of execution, it suggests the existence of a consensus that the method in question is the most humane of the currently available methods, because, "[a]s modern sensibilities have moved away from [particular] methods of carrying out a death sentence, so too have the death-penalty procedures of the States and the Federal Government." *Workman*, 486 F.3d at 907. In addition, where a majority of jurisdictions use a particular method, it suggests that "society considers the *risk* [of pain]" inherent in that method to be acceptable. *Helling*, 509 U.S. at 36 (emphasis added).

4. In this case, petitioners do not contend that a particular method of execution would *always* inflict an excessive amount of pain when compared to a feasible alternative; instead, petitioners contend that Kentucky's method of execution is invalid because there is a *risk* that it would inflict a greater degree of pain than the alternative methods that they identify. Put another way, petitioners contend that Kentucky's method would inflict greater pain only in *some* cases: *i.e.*, where the drugs involved are improperly administered.

Although this Court has never directly addressed the issue, the Court's cases suggest that, when an individual is challenging a proposed method of execution on such a probabilistic basis, the challenger must show that there is a *substantial* risk—not merely a remote or hypothetical one—that the method of execution would inflict a *significantly* greater degree of pain than a feasible alternative method (taking into account any countervailing risks posed by the alternative method).

For example, in *Resweber*, the Court rejected the claim that a State's subsequent effort to carry out an execution after a mechanical malfunction would violate the Eighth Amendment, notwithstanding the risk that a similar accident could occur at the second attempt. 329 U.S. at 464 (plurality opinion). Justice Frankfurter, who concurred in the judgment, observed that "a hypothetical situation, which assumes a series of abortive attempts at electrocution or even a single, cruelly willful attempt, would * * * raise different questions." *Id.* at 471; see *Glass* v. *Louisiana*, 471 U.S. 1080, 1086 (1985) (Brennan, J., dissenting from denial of certiorari) (recognizing that a method of execution is unconstitutional only where "it causes torture or a lingering death in a significant number of cases") (internal quotation marks and citation omitted); cf. *Gregg*, 428 U.S. at 188 (joint opinion) (stating that the death penalty "could not be imposed under sentencing procedures that created a substantial risk that it would be inflicted in an arbitrary and capricious manner").

This Court's cases involving challenges to conditions of confinement—which the Court has recognized are in some respects analogous to challenges to aspects of an execution method, see *Hill* v. *McDonough*, 126 S. Ct. 2096, 2101-2104 (2006); *Nelson* v. *Campbell*, 541 U.S. 637, 644 (2004)—further support the conclusion that a challenger must show a substantial risk of the requisite quantum of pain. In *Farmer* v. *Brennan*, 511 U.S. 825 (1994), the Court considered a claim that prison officials had failed to protect a prisoner from the risk of violence at the hands of other prisoners. *Id.* at 830-831. The Court repeatedly stated that, "[f]or a claim * * * based on a failure to prevent harm, the inmate must show," *inter alia*, "that he is incarcerated under condi-

tions posing a *substantial* risk of serious harm." *Id.* at 834 (emphasis added); see *id.* at 828, 836, 847. The Court likewise observed that the risk of "accidental" harm does not violate the Eighth Amendment, see *id.* at 840, and that the Constitution is not offended when officials "respond[] reasonably to the risk, even if the harm ultimately was not averted," *id.* at 844.

Similarly, in *Helling*, the Court explained, with regard to a conditions-of-confinement claim that alleged a risk of *future* injury, that it would constitute "deliberate indifference" if officials ignored "a condition of confinement that is sure or *very likely* to cause serious illness and needless suffering" in the future. 509 U.S. at 33 (emphasis added). In addition, the Court stated that the inmate "must show that the risk of which he complains is not one that today's society chooses to tolerate." *Id.* at 36.

While conditions-of-confinement claims do not involve punishment per se, there is no justification for adopting a different—and more stringent—standard for an Eighth Amendment claim concerning the possible infliction of pain during an execution than for a claim concerning the possible infliction of bodily injury (or death) during a confinement for a term of years. In both cases, the pain is not inflicted deliberately, but is a possible unintended consequence of an effort to achieve a legitimate penological objective. There is no reason to conclude that the Eighth Amendment allows for a different risk of pain in either context. Instead, in both cases, the Eighth Amendment affords the benefit of doubt to the government unless the claimant can show the existence of a substantial risk of harm.

Petitioners concede that "[a]n insignificant and unforeseeable risk * * * will not violate the Constitu-

tion," Br. 39, but suggest that, where a risk is foreseeable, even a remote risk could serve as the basis for a valid Eighth Amendment claim, Br. 29, 40, 42. Such a standard, however, cannot be squared with this Court's precedents upholding the constitutionality of methods of capital punishment—especially *Resweber*, in which the risk of error in a second electrocution was plainly apparent, given the failure of the first attempt. The fundamental difficulty with petitioners' approach is that, "[a]t some level, every execution procedure ever used contains risk that the individual's death will not be entirely pain free." *Workman*, 486 F.3d at 908; see *Resweber*, 329 U.S. at 464 (plurality opinion) (noting that "[t]he cruelty against which the Constitution protects a convicted man is * * * not the necessary suffering involved in any method employed to extinguish life humanely").

Moreover, under petitioners' standard, where an individual in one jurisdiction identifies a risk presented by a particular method of execution, however hypothetical, other individuals, in that jurisdiction and others, will inevitably pursue similar claims—with each wave of litigation engendering further delay in the execution of death sentences, even if the claims are ultimately not successful. This Court has repeatedly recognized that "a State retains a significant interest in meting out a sentence of death in a timely fashion." *Nelson*, 541 U.S. at 644; see *Hill*, 126 S. Ct. at 2103; *Calderon* v. *Thompson*, 523 U.S. 538, 556 (1998). That interest would be greatly undermined if an individual could delay his execution merely by conceiving of some marginal risk arising from a particular execution method.

A further difficulty with petitioner's proposed test is that it would frustrate governmental efforts to experi-

ment with more humane methods of execution. If any risk with a method requires its abandonment in favor of a method perceived to be superior, there will be little scope for governments to modify their procedures. Petitioners' test would essentially mandate a single method of execution nationwide. That not only is inconsistent with general principles of federalism and the history of the evolution of capital punishment, but might preclude development of an even more humane method based on early evidence of risk that proves unfounded.

5. Finally, both the history of the Eighth Amendment and this Court's cases interpreting it indicate that, with regard to a claim that a method of punishment inflicts an excessive amount of pain, the Eighth Amendment has a subjective, as well as objective, component. The Eighth Amendment proscribes the "unnecessary and *wanton* infliction of pain." *Gregg*, 428 U.S. at 173 (joint opinion) (emphasis added). The methods of punishment that the Framers of the Constitution viewed as cruel and unusual, such as burning, disemboweling, and drawing and quartering, were all methods which were known to inflict a considerable amount of pain—and, indeed, which were adopted specifically for that reason. Consistent with that understanding, this Court, in evaluating method-of-execution claims, has consistently considered whether the government acted with the *intent* of inflicting pain. See, *e.g.*, *Resweber*, 329 U.S. at 477 (plurality opinion); *Kemmler*, 136 U.S. at 447.

Where, as here, an individual is not directly challenging a legislature's choice of execution method, but is instead challenging *government officials'* decisions concerning how to *implement* the legislature's chosen method, the subjective component of the Eighth Amendment requires the challenger to demonstrate, at a mini-

mum, that the officials acted with deliberate indifference to a constitutionally significant risk of pain. This Court has long required a showing of deliberate indifference in cases involving challenges to conditions of confinement; indeed, in originally imposing that requirement, the Court relied heavily on its earlier cases (such as *Gregg* and *Resweber*) holding that the Eighth Amendment proscribes the "wanton" infliction of pain. See *Estelle*, 429 U.S. at 104-105. A challenge to officials' decisions concerning how to implement a sentence of death is closely analogous to a challenge to officials' conduct regarding a prisoner's conditions of confinement. In each case, the precise conduct being challenged "does not purport to be the penalty formally imposed for [the] crime," *Wilson* v. *Seiter*, 501 U.S. 294, 302 (1991), and, for that reason, a showing of deliberate indifference is necessary in order to render the challenged conduct "punishment" for Eighth Amendment purposes, see *id.* at 305. As with the "substantial risk" component of the Eighth Amendment standard, there is no justification for applying a different state-of-mind requirement for a challenge concerning the possible infliction of pain during an execution than for a challenge concerning the possible infliction of bodily injury during a term of imprisonment.

In order to demonstrate deliberate indifference, an individual must show that the relevant officials are acting with reckless disregard toward a constitutionally significant risk of pain. *Wilson*, 501 U.S. at 836, 839. It is therefore not sufficient for the individual simply to identify some risk of pain that could be avoided through the exercise of due care. See *Whitley* v. *Albers*, 475 U.S. 312, 319 (1986). Nor is it enough for a prisoner to identify a "risk of negligence in implementing a death-penalty procedure." *Workman*, 486 F.3d at 907. Instead,

"[i]t is obduracy and wantonness, not inadvertence or error in good faith, that characterize the conduct prohibited by the Cruel and Unusual Punishments Clause." *Whitley*, 475 U.S. at 319.

C. Petitioners Have Failed To Show That Kentucky's Method Of Execution Violates The Eighth Amendment

In this case, petitioners seemingly concede that, "if performed properly," an execution by lethal injection using the same series of three drugs at issue here would be "humane and constitutional." Br. 31. Petitioners' claim instead focuses on two possible ways in which a subject would feel pain during an execution using that series of drugs—both of which depend on the improper administration of the first drug in the series, sodium thiopental. First, petitioners contend that, if the dose of sodium thiopental is improperly administered and the subject is not rendered unconscious, the subject would experience the "agony" of suffocation from the administration of pancuronium bromide. Br. 45. Second, petitioners contend that, if the subject is not rendered unconscious from the administration of sodium thiopental and does not die from the administration of pancuronium bromide, "the injection of potassium [chloride] * * * will cause excruciating pain" before it induces death. *Ibid.* The Kentucky Supreme Court—like every other federal court of appeals or state court of last resort to have considered similar claims—correctly held that petitioners failed to demonstrate a constitutionally unacceptable risk of pain in carrying out Kentucky's chosen method of execution.

1. a. As a preliminary matter, petitioners' claim fails because they have not shown that any risk inherent in Kentucky's three-drug series is one that society would

not tolerate. The federal government, and all but one of the States that authorize capital punishment, use lethal injection—and the vast majority of those jurisdictions use the same series of three drugs (or their functional equivalents) as Kentucky. See p. 3, *supra*. By contrast, petitioners identify no jurisdiction that uses the exact alternative methods that they propose. The overwhelming national consensus in support of the three-drug method strongly supports the conclusion that, whatever the risk that the improper administration of the drugs will result in pain, it is a risk that "today's society chooses to tolerate." *Helling*, 509 U.S. at 36; see *Atkins*, 536 U.S. at 312.

b. While petitioners list various allegedly problematic aspects of Kentucky's execution protocol, see Br. 12-20, petitioners do not contend, much less demonstrate, that Kentucky's protocol so differs from the protocols of other jurisdictions as to render the overwhelming societal consensus in support of the three-drug method irrelevant. To the contrary, in arguing that Kentucky's method gives rise to a constitutionally significant risk of pain, petitioners affirmatively rely on the experiences of other jurisdictions in carrying out executions using the same three-drug series. See Br. 8-9, 20-24.

The anecdotal evidence from other jurisdictions cited by petitioners, however, falls far short of establishing that Kentucky's method of execution would inflict a *substantial* risk of significantly greater pain than petitioners' proposed alternative methods. None of that evidence was introduced in the record in this case, and that is reason enough to affirm the decision below. Even if it had been, however, that evidence would fail to make out the necessary showing to render *Kentucky's* method of lethal injection unconstitutional. It is unclear whether

any of the individuals in petitioners' examples actually suffered excessive pain during their executions.

Petitioners primarily rely on the 2006 Florida execution of Angel Diaz. See Br. 20-21. In that case, it does appear that the execution team failed to insert the intravenous line properly, with the result that drugs were injected into Diaz's muscle tissue rather than his veins. See *Lightbourne* v. *McCollum*, No. SC06-2391, 2007 WL 3196533, at *15 (Fla. Nov. 1, 2007). But the Florida Supreme Court and a state investigation both found that the problems experienced in Diaz's execution were due not to any inherent flaws in the three-drug series, but rather the failure of particular individuals to follow Florida's written protocol. *Id.* at *21; see *id.* at *15-*16 (noting trial-court finding that Diaz did not suffer any pain). And while petitioners contend that California has experienced six "aberrant" executions among the eleven it has performed by lethal injection, see Br. 22, the source on which petitioners rely states only that, according to notes taken at the executions, those individuals may not have ceased *breathing* as a result of administration of sodium thiopental—not that any of those individuals remained *conscious*. See *Morales* v. *Tilton*, 465 F. Supp. 2d 972, 975 (N.D. Cal. 2006).

Finally, even assuming, *arguendo*, that any of the individuals in the examples petitioners cite did suffer excessive pain before being executed, that is not sufficient to demonstrate that *petitioners* face a substantial risk of such pain. See *Helling*, 509 U.S. at 35-36. There is always *some* risk that an execution will not go as planned, but petitioners have failed to quantify that risk—and other courts to have considered similar challenges, like the Kentucky Supreme Court, have concluded that the risk is too remote to be constitutionally

significant. See, *e.g.*, *Taylor* v. *Crawford*, 487 F.3d 1072, 1085 (8th Cir. 2007), petition for cert. pending, No. 07-303 (filed Sept. 5, 2007); *Workman*, 486 F.3d at 910; *Hamilton* v. *Jones*, 472 F.3d 814, 817 (10th Cir.), cert. denied, 127 S. Ct. 1054 (2007). Accordingly, there is no basis for finding a constitutionally unacceptable risk on the record in this case.

c. To the extent that petitioners focus on particular features of Kentucky's execution protocol, petitioners have failed to show that those features substantially increase the risk that they would suffer significant pain during their executions. Here again, petitioners' argument is based entirely on anecdotal evidence or theoretical concerns. As to the risk that the sodium thiopental would be improperly prepared, the trial court specifically found that "there would be minimal risk of improper mixing" of the dose of sodium thiopental if the manufacturer's instructions were followed. J.A. 761. And respondents presented testimony indicating that the preparation of sodium thiopental was not difficult. J.A. 623.

As to the risk that the intravenous line would be improperly set, Kentucky takes many of the same precautions as the federal government. Most importantly, Kentucky, like the federal government, uses qualified personnel to set the line—in Kentucky's case, a phlebotomist and emergency medical technician, who, according to the trial testimony, "know more about [setting lines] than just about anybody else." J.A. 385; see J.A. 580-581. Those personnel had many years of experience and were required to undergo regular practice sessions before participating in an actual execution. J.A. 273-274, 984. In addition, Kentucky, like the federal government (when it obtains access by means of a peripheral vein),

requires the personnel to set a backup line; if the initial dose of sodium thiopental through the primary line does not appear to render the subject unconscious within 60 seconds, an additional dose is administered through the backup line before the last two drugs are delivered. J.A. 279-280, 317-318, 337-338, 978-979. The warden and deputy warden are present in order to monitor the flow of lethal drugs into the subject's vein (and to direct the personnel to switch to the backup line if necessary); respondents presented testimony indicating that it would be "very obvious," even to someone without medical training, if drugs were flowing into the surrounding tissue rather than the vein. J.A. 386; see J.A. 323, 353, 600-601. Finally, while the personnel have one hour to establish peripheral intravenous access, they are not *required* to spend the entire hour attempting to do so—and if they are unable to do so, the execution will be postponed. J.A. 289, 761-762, 976.

Moreover, petitioners acknowledge that there is *no* evidence that there have been any difficulties with Kentucky's execution protocol in practice. See Br. 9. As the Kentucky Supreme Court noted, there has been only one prior execution by lethal injection in Kentucky—and the individual who was executed "went to sleep within 15 seconds to one minute from the moment that the warden began the execution and never moved or exhibited any pain whatsoever subsequent to losing consciousness." J.A. 807; see J.A. 134, 147-148, 189, 277-278, 320, 502-503. While petitioners suggest that "there is no way to know whether [that] execution was humane," Br. 9, the burden is on petitioners to *prove* a substantial risk of pain, not on the State to *disprove* the existence of pain in an execution in which there is no evidence thereof. The lack of even anecdotal evidence of difficulties with

Kentucky's execution protocol strongly counsels against a conclusion that the protocol would subject petitioners to a constitutionally significant risk of pain.

d. In any event, petitioners have failed to show that there is a substantial risk that Kentucky's method of execution would inflict a significantly greater degree of pain than a feasible alternative method, because neither of the two alternative methods that petitioners identify before this Court is obviously superior to the three-drug method and each has its own disadvantages.

First, petitioners contend (Br. 51-57), apparently for the first time in this case, that Kentucky could switch from the three-drug method to a one-drug method: *i.e.*, by using a single dose of sodium thiopental (or another barbiturate). Other jurisdictions, however, have considered and validly rejected that alternative. A committee established to review Tennessee's execution procedures, while recognizing that the one-drug method would be easier to administer, concluded that it would likely take longer than the three-drug method. See *Workman*, 486 F.3d at 919. An execution using that alternative would thus potentially implicate a convict's Eighth Amendment interest in not being subjected to a "lingering death," *Kemmler*, 136 U.S. at 447, and, at a minimum, would contravene the government's legitimate penological interest in ensuring that an execution is carried out in an expeditious manner.

The Tennessee committee also noted that there was no record of the efficacy of the one-drug method, because it had not been used in any other jurisdiction, and concluded that the "required dosage of [barbiturate] would be less predictable and more variable when it is used as the sole mechanism for producing death." *Workman*, 486 F.3d at 919. Because the one-drug

method has never been tested, it is theoretically possible that an execution using the one-drug method could fail, see J.A. 24 (alleging in complaint that "sensitivity to thiopental varies greatly among the population and some individuals"), whereas there have been no cases in which an execution using the three-drug method was unsuccessful. For those reasons, the one-drug method does not constitute a feasible alternative method of execution against which Kentucky's three-drug method can validly be measured.

Petitioners suggest that, at a minimum, Kentucky could remove pancuronium bromide from its execution protocol. See Br. 51-53. The trial court, however, specifically found that the inclusion of pancuronium bromide served two legitimate purposes: first, to prevent involuntary muscular movements (which could interfere with the administration of the dose of potassium chloride and could contravene the interests of the convict and the government in ensuring that the execution is conducted with dignity), and second, to stop respiration (and thereby ensure that death is effectuated). J.A. 763; see *Workman*, 486 F.3d at 909; *id.* at 918 (report of Tennessee committee).

Second, petitioners contend that Kentucky could more closely monitor the anesthetic depth of the subject, so as to ensure that the subject is properly anesthetized when the last two drugs in the series are administered. See Br. 57-59. As a preliminary matter, that alternative is premised on the unproven hypothesis that individuals are not properly anesthetized under the three-drug method, despite the massive dose of sodium thiopental that they are typically given—ten times the amount used in a typical surgical procedure, and enough to render an

individual unconscious within 60 seconds (and for hours). See Resp. Br. 37, 49.

Although petitioners are conspicuously circumspect about specifying who should conduct that monitoring, they imply that it should be an anesthesiologist. See, *e.g.*, *id.* at 58-59 (referring to "monitoring by [an] anesthesia professional"). Such an alternative, however, would likely not be feasible, because it is doubtful that Kentucky could find a doctor to participate in an execution (even if state law permitted it to do so). See Ky. Rev. Stat. Ann. § 431.220(3) (LexisNexis 1999). The American Medical Association and the the American Society of Anesthesiologists (ASA) have determined that it is unethical for doctors to participate in executions. See ASA Br. 2-3. At least one group opposed to the death penalty has even brought suit to force a state medical board to take disciplinary action against doctors who participate in executions. See *Zitrin* v. *Georgia Composite State Bd. of Med. Exam'rs*, No. A07A0914, 2007 WL 3025835, at *1 (Ga. Ct. App. Oct. 18, 2007). Accordingly, where lower courts have refused to allow executions to proceed without medical monitoring of anesthetic depth, States have been unable to find a qualified doctor who was willing to participate. See, *e.g.*, *Morales*, 465 F. Supp. 2d at 975-976; cf. *Gonzales* v. *Oregon*, 546 U.S. 243, 252 (2006) (noting that, under Oregon law, a doctor may provide, "but may not administer," a lethal dose). But in a constitutional system that permits the death penalty, the baseline for measuring whether a method inflicts unnecessary pain must be a *feasible* alternative. A theoretical possibility that could not be carried out consistent with the prevailing medical ethics regime is not such an alternative. Like the one-drug method, therefore, medical monitoring of anesthetic

depth does not constitute a feasible alternative method of execution.

2. Finally, even if petitioners could show that Kentucky's method of execution would subject them to a constitutionally significant risk of pain, petitioners have failed to show that, in proposing that method, respondents are acting with deliberate indifference to any such risk. Petitioners concede that Kentucky, like other States, switched to lethal injection because it believed that lethal injection was a *more* humane method of execution than its prior method, electrocution. See Br. 31. Moreover, "[t]he whole point of the [three-drug series] is to avoid the needless infliction of pain, not to cause it," because "[t]he idea is to anesthetize the individual with one drug before the State administers the remaining two drugs, so that the serial combination of drugs causes a quick and painfree death." *Workman*, 486 F.3d at 907.

Petitioners seemingly suggest that Kentucky officials acted with deliberate indifference in adopting the three-drug method because they copied that method from other States. See Br. 8. It was hardly reckless for Kentucky officials to do so, however, in light of the fact that other States had used the same method with few difficulties (and given the absence of any actual evidence concerning the efficacy of alternative methods). J.A. 106, 226, 307. In adopting the three-drug method, moreover, Kentucky did not blindly follow the protocols of other States, but instead made certain modifications to those protocols in developing its own. J.A. 156.

In addition, since Kentucky initially adopted the three-drug method, it has reevaluated and modified its protocol in response to concerns about its efficacy. Among other changes, state officials increased the initial dose of sodium thiopental from 2 grams to 3 grams—a

"unilateral action[]" that the trial court described as "commendable." J.A. 768; see J.A. 71, 255-256, 290-291, 639-640. Other jurisdictions either have conducted or are in the process of conducting reviews of their execution protocols; committees in Florida and Tennessee recommended various modifications to their protocols (while retaining the three-drug series), see *Lightbourne*, 2007 WL 3196533, at *2, *16-*18; *Workman*, 486 F.3d at 913-922, and the BOP continually reassesses various aspects of its own protocol for federal executions conducted by lethal injection. Those reviews reflect that Kentucky and other jurisdictions are "intent not just on satisfying the requirements of the Eighth Amendment but on far exceeding them." *Id.* at 909. Petitioners' proposed standard would have the perverse effect of discouraging such laudable internal reviews—and the adoption of new and potentially improved methods of execution—because, anytime a jurisdiction engaged in such a review, it would expose itself (and other jurisdictions using that same method) to claims that its existing method of execution imposes a constitutionally unacceptable risk of pain in comparison to the alternatives under consideration.

* * * * *

The Eighth Amendment proscribes methods of execution that entail a substantial risk of excessive pain, and protects against the administration of capital punishment in a manner that is deliberately indifferent to such an unacceptable risk. But because petitioners in this case presented insufficient evidence that Kentucky's method of execution fails either of those requirements, the Kentucky Supreme Court correctly rejected petitioners' Eighth Amendment claim.

CONCLUSION

The judgment of the Kentucky Supreme Court should be affirmed.

Respectfully submitted.

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APPENDIX

ADDENDUM TO BOP EXECUTION PROTOCOL
FEDERAL DEATH SENTENCE
IMPLEMENTATION PROCEDURES
EFFECTIVE JULY 1, 2007

A. Federal death sentences are implemented by an intravenous injection of a lethal substance or substances in a quantity sufficient to cause death, such substance or substances to be determined by the Director, Federal Bureau of Prisons (BOP) and to be administered by qualified personnel selected by the Warden and acting at the direction of the United States Marshal. 28 CFR 26.3. The procedures utilized by the BOP to implement federal death sentences shall be as follows unless modified at the discretion of the Director or his/her designee, as necessary to (1) comply with specific judicial orders; (2) based on the recommendation of on-site medical personnel utilizing their clinical judgment; or (3) as may be required by other circumstances.

B. The identities of personnel considered for and/or selected to perform death sentence related functions, any documentation establishing their qualifications and the identities of personnel participating in federal judicial executions or training of such judicial executions shall be protected from disclosure to the fullest extent permitted by law.

C. The lethal substances to be utilized in federal lethal injections shall be Sodium Pentothal, (thiopental); Pancuronium Bromide and Potassium Chloride.

D. Not less than fourteen (14) days prior to a scheduled execution, the Director or designee, in conjunction with the United States Marshall Service, shall make a final selection of qualified personnel to serve as the executioner(s) and their alternates. See BOP Execution Protocol, Chap. 1, §§ III (F) and IV (B) & (E). Qualified personnel shall have necessary training or experience in the specific function they will perform in implementing the federal death sentence. Any documentation establishing the qualifications, including training, of such personnel shall be maintained by the Director or designee.

E. The Director or designee shall appoint a senior level Bureau employee to assist the United States Marshal in implementing the federal death sentence. The Director or designee shall appoint an additional senior level Bureau employee to supervise the activities of personnel preparing and administering the lethal substances.

F. The lethal substances shall be prepared by qualified personnel in the following manner unless otherwise directed by the Director, or designee, on the recommendation of the on-site medical personnel. The lethal substances shall be placed into four sets of numbered and labeled syringes. Two of the sets of syringes are used in the implementation of the death sentence and two sets are available as a backup.

G. Approximately thirty (30) minutes prior to the scheduled implementation of the death sentence, the condemned individual will be escorted into the execution room. The condemned individual will be

restrained to the execution table. The leads of a cardiac monitor will be attached by qualified personnel. A suitable venous access line or lines will be inserted and inspected by qualified personnel and a slow rate flow of normal saline solution begun.

H. Lethal substances shall be administered intravenously. Venous catheterization of the fermoral vein is the preferred access method. The Director or designee may approve a different method of venous access (1) based on the training and experience of personnel establishing the intravenous access; (2) to comply with specific orders of federal courts; or (3) based upon a recommendation from qualified personnel available at the execution facility.

When venous access is acquired through the femoral vein (accessed near the groin), a set of syringes will consist of:

Syringe # 1 contains 5.0 grams of Sodium Pentothal in 10 ccs of diluent,
Syringe # 2 contains 60 ccs of saline flush,
Syringe # 3 contains 120 milligrams of Pancuronium Bromide,
Syringe # 4 contains 120 milligrams of Pancuronium Bromide,
Syringe # 5 contains 60 ccs of saline flush,
Syringe # 6 contains 120 mEq of Potassium Chloride and
Syringe # 7 contains 120 mEq of Potassium Chloride.

When venous access is acquired through a peripheral vein, a set of syringes will consist of:

Syringe # 1 contains 1.25 grams of Sodium Pentothal in 50 ccs of diluent,
Syringe # 2 contains 1.25 grams of Sodium Pentothal in 50 ccs of diluent,
Syringe # 3 contains 1.25 grams of Sodium Pentothal in 50 ccs of diluent,
Syringe # 4 contains 1.25 grams of Sodium Pentothal in 50 ccs of diluent,
Syringe # 5 contains 60 ccs of saline flush,
Syringe # 6 contains 120 milligrams of Pancuronium Bromide,
Syringe # 7 contains 120 milligrams of Pancuronium Bromide,
Syringe # 8 contains 60 ccs of saline flush,
Syringe # 9 contains 120 mEq of Potassium Chloride and
Syringe # 10 contains 120 mEq of Potassium Chloride.

Each syringe will be administered in the order set forth above when directed by supervisory personnel.

If peripheral venous access is utilized, two separate lines shall be inserted in separate locations and determined to be patent by qualified personnel. A flow of saline shall be started in each line and administered at a slow rate to keep the line open. One line will be used to administer the lethal substances and the second will be reserved in the event of the failure of the first line. Any failure of a venous access line shall be immediately reported to the on-

site medical personnel and the Director's designee. The Director's designee shall take steps consistent with paragraph L below.

I. At the direction of the U.S. Marshal, the flow of lethal substances shall be initiated and controlled by qualified personnel. The first lethal substance (Sodium Pentathol) will be administered followed by saline flush.

Lethal substances will be administered into two identical sets of IV lines, one which is connected to the condemned individual and the other into a disposal container in the execution room. The personnel administering the lethal substances shall not be informed as to which line is connected to the condemned individual.

J. After the first lethal substance has rendered the condemned individual unconscious as determined by qualified personnel, BOP supervisory personnel will direct personnel to administer the remaining lethal substances (Pancuronium Bromide and Potassium Chloride). The fact, time and order of administration of each substance shall be documented and the documentation maintained. The condemned individual's consciousness will be monitored by qualified personnel.

K. In the event that death of the condemned individual has not occurred within five minutes after completion of the administration of the second syringe of Potassium Chloride, personnel shall proceed as outlined in paragraph L.

L. If at any time during the federal death penalty procedure a member of the execution team becomes aware of a situation not contemplated in this procedure, the team member should advise a supervisory BOP team member who shall forthwith advise the Director's on-site designee. The Director's on-site designee, after consulting with the United States Marshal, may direct that the procedure be interrupted, the curtains to the witness viewing rooms be closed, and if necessary, for witnesses to be removed from the facility. A complete assessment of the situation may be done, including if necessary, input from the on-site medical personnel. After consultation with appropriate personnel, a decision will be made to re-commence the procedure from the beginning, to re-commence the procedure from the point of its interruption, or to re-commence the procedure from the beginning at a different time and/or date.

AMICUS CURIAE BRIEF

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IN THE

Supreme Court of the United States

RALPH BAZE, et al.,

Petitioners,

vs.

JOHN D. REES, et al.,

Respondents.

On Writ of Certiorari to the Supreme Court of Kentucky

BRIEF *AMICUS CURIAE* OF THE CRIMINAL JUSTICE LEGAL FOUNDATION IN SUPPORT OF RESPONDENTS

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QUESTIONS PRESENTED

1. When a state's method of execution does not present a substantial risk of the wanton infliction of pain, does it nonetheless violate the Eighth Amendment if it presents a risk that is not strictly necessary?

2. Is a state constitutionally required to change its method of execution every time an alternative with a lower risk of pain is shown to be available, thereby creating a permanent new layer of litigation in capital cases?

3. Does the three-drug method of lethal injection currently in use in almost all capital punishment states violate the Eighth Amendment merely because other drug combinations may involve less risk of pain?

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United States v. Munsingwear, Inc., 340 U. S. 36, 71 S. Ct. 104, 95 L. Ed. 36 (1950) 15

Vasquez v. Harris, 503 U. S. 1000, 112 S. Ct. 1713, 118 L. Ed. 2d 418 (1992) 11

Walton v. Arizona, 497 U. S. 639, 110 S. Ct. 3047, 111 L. Ed. 2d 511 (1990) 24

Wilkerson v. Utah, 99 U. S. 130, 9 Otto 130, 25 L. Ed. 345 (1879) 13

Wilson v. Seiter, 501 U. S. 294, 111 S. Ct. 2321, 115 L. Ed. 2d 271 (1991) 18

Woodson v. North Carolina, 428 U. S. 280, 96 S. Ct. 2978, 49 L. Ed. 2d 944 (1976) 9

Workman v. Bredesen, 486 F. 3d 896 (CA6 2007) 20

United States Statutes

18 U. S. C. § 3771 6

28 U. S. C. § 2244(b) 5

42 U. S. C. §1983 5

Rule of Court

Federal Rule of Civil Procedure 60(b) 5

Miscellaneous

141 Cong. Rec. 15,062 (1995) 5

American Heritage Dictionary (3d ed. 1992) 16

American Medical Association, Code of Medical Ethics (2007) 25

American Veterinary Medical Assn., AVMA Guidelines on Euthanasia 9 (June 2007) 12, 13

Articles on Death Penalty Deterrence, http://www.cjlf.org/deathpenalty/DPDeterrence.htm 8

Baker, Justice Not Revenge: A Crime Victim's Perspective on Capital Punishment, 40 UCLA L. Rev. 339 (1992) 11, 12

Cloninger & Marchesini, Execution and Deterrence: A Quasi-controlled Group Experiment, 33 Applied Econ. 569 (2001) 7

Cloninger & Marchesini, Execution Moratoriums, Commutations and Deterrence: The Case of Illinois, 38 Applied Econ. 967 (2006) 7

Hoover, Injection OKd as Alternative Death Penalty, San Francisco Chronicle, Aug. 29, 1992, pp. A11, A19 12

Ingram, Legislators Press for Change to Lethal Injection, Los Angeles Times, Apr. 22, 1992, p. A11 11

The Federalist (C. Rossiter ed. 1961) (J. Madison) 8

J. Fund, Stealing Elections (2004) 12

J. Heller, Catch-22 (1961) 23

Levine, Maryland Executes Oken, Washington Post, June 18, 2004, p. A1 ..... 6, 10

Liptak, Does Death Penalty Save Lives? A New Debate, New York Times, Nov. 18, 2007, p. 1 8

Lungren and Krotoski, Public Policy Lessons from the Robert Alton Harris Case, 40 UCLA L. Rev. 295 (1992) 11

American Society of Anesthesioligists, Message from the President: Observations Regarding Lethal Injection, available at http://www.asahq.org/news/asanews063006.htm (June 30, 2006) 25

Shepherd, Murders of Passion, Execution Delays, and the Deterrence of Capital Punishment, 33 J. Legal Studies 283 (2004) 7

Taylor, "Sex Slave" Killer Dies of Cancer in Nevada Hospital, San Francisco Chronicle, July 20, 2002, p. A15 7

IN THE

Supreme Court of the United States

RALPH BAZE, et al.,

Petitioners,

vs.

JOHN D. REES, et al.,

Respondents.

BRIEF *AMICUS CURIAE* OF THE CRIMINAL JUSTICE LEGAL FOUNDATION IN SUPPORT OF RESPONDENTS

INTEREST OF *AMICUS CURIAE*

The Criminal Justice Legal Foundation (CJLF)[1] is a nonprofit California corporation organized to participate in litigation relating to the criminal justice system as it affects the public interest. CJLF seeks to bring the constitutional protection of the accused into balance with the rights of the victim and of society to rapid, efficient, and reliable determination of guilt and swift execution of punishment.

Litigation over methods of execution has halted the implementation of capital punishment, many years

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1. The parties have consented to the filing of this brief.

No counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No persón other than *amicus curiae* CJLF made a monetary contribution to its preparation or submission.

after the states sought to end such litigation by adopting the method touted by the opponents and their experts as the humane alternative. See *Gomez* v. *United States Dist. Court for Northern Dist. of Cal.*, 503 U. S. 653, 656 (1992) (Stevens, J., dissenting). This litigation further delays justice in cases where justice is already long overdue. It diminishes the deterrent effect of capital punishment, possibly costing innocent lives. The delay is contrary to the interests CJLF was formed to protect.

SUMMARY OF FACTS AND CASE

Fifteen years ago, Ralph Baze murdered two police officers, Sheriff Steve Bennett and Deputy Sheriff Arthur Briscoe. See *Baze* v. *Commonwealth*, 965 S. W. 2d 817, 819 (Ky. 1997). Baze shot each officer in the back with an assault rifle when the officers attempted to serve him with five fugitive felony warrants. *Ibid.*; see also *Baze* v. *Rees*, 217 S. W. 3d 207, 209 (Ky. 2006) ("*Baze II*"). First Baze murdered Sheriff Bennett, then he shot Deputy Sheriff Briscoe twice in the back as the Deputy Sheriff was attempting to retreat. 965 S. W. 2d, at 819. When Deputy Sheriff Briscoe fell to the ground, Baze stood over him and fired his assault rifle into the back of his head. *Ibid.*

Thomas Bowling was convicted for the intentional murders of Eddie and Tina Earley. See *Bowling* v. *Commonwealth*, 873 S. W. 2d 175, 176 (Ky. 1993); see also *Baze II*, 217 S. W. 3d, at 209. Around 7 a.m., Bowling crashed his auto into the driver's side of the victims' parked car. See *Bowling*, *supra*, at 176. A witness saw Bowling fire into the victims' car, return to his own car, go back to check on the victims, and then return to his car again and flee the scene. *Id.*, at 176-177.

Ralph Baze and Thomas Bowling were both sentenced to death. See *Baze II*, 217 S. W. 3d, at 209. Lethal injection is the method of execution in Kentucky unless the inmate chooses electrocution. *Ibid.* In Kentucky, death by lethal injection occurs through the administration of three chemicals: sodium thiopental, pancuronium bromide, and potassium chloride. *Id.*, at 212. Kentucky's protocol is based on the protocols adopted by other states. App. to Pet. for Cert. 17 (finding Kentucky's protocol mirrored Indiana, Virginia, Georgia, and Alabama).

Both men filed the present action in the Franklin Circuit Court to challenge the constitutionality of Kentucky's lethal injection protocol. See App. to Pet. for Cert. 12 (challenging the lethal injection protocol under the Eighth Amendment and under Section 17 of Kentucky's Constitution). After reviewing extensive evidence, the trial court held, with one exception, that Kentucky's lethal injection protocol met constitutional requirements. J. A. 769; see also *Baze II*, 217 S. W. 3d, at 211 (stating the one exception to constitutionality was removed by the Kentucky Department of Corrections after the circuit court rendered its decision). The Kentucky Supreme Court affirmed and held Kentucky's lethal injection method violates neither the Eighth Amendment of the United States Constitution nor Kentucky's own constitutional ban on cruel and usual punishment. *Baze II*, 217 S. W. 3d, at 212.

This Court granted certiorari on September 25, 2007.

SUMMARY OF ARGUMENT

This case should be decided in a way that brings this chapter to a close, not in a way that creates a moving target for a permanent new round of litigation in

capital cases. Congress limited successive habeas petitions in Antiterrorism and Effective Death Penalty Act of 1996 in order to bring capital cases to a close, and it did so for weighty and important reasons. The goal of that legislation should not be circumvented.

There is no constitutional requirement that execution of the death penalty be completely painless or involve the minimum achievable risk of pain. So long as the method is not cruel, it is within constitutional limits. A risk of pain which is both severe and prolonged must be substantial (or significant) before it becomes a constitutional issue.

If any change is required to the Kentucky protocol, the check for consciousness implemented in Florida and Missouri is the only change needed. That check, which does not require a doctor, is sufficient to determine that the anesthetic has been successfully delivered to the bloodstream, and there is essentially no risk of severe pain. Requiring a doctor's participation would expose the doctors to accusations under medical ethics rules, effectively preventing executions.

ARGUMENT

I. This case should be decided in a way that will bring this chapter to a close, not create a moving target for a permanent new round of litigation in capital cases.

Petitioner asks this Court to adopt an "unnecessary risk" standard for methods of execution and to define "unnecessary" by reference to *presently* available alternatives. See Brief for Petitioner 40. This proposal would create a moving target for methods of execution. A method upheld as constitutional today could be attacked again tomorrow, simply because another

alternative had been developed or discovered. The delay and denial of justice that we have seen in connection with the present litigation could be repeated multiple times.

A. The Consequences of Delay.

When the Congress of the United States enacted the Antiterrorism and Effective Death Penalty Act of 1996 (AEPDA), it made a powerful statement of public policy regarding the delay in executing capital judgments. The cases were taking too long and going through too many rounds of review. See, *e.g.*, 141 Cong. Rec. 15,062, col. 2 (1995) (statement of Sen. Hatch). With regard to repeated reviews, Congress clamped down hard on what was then the primary vehicle for repeated litigation, the successive habeas petition. See 28 U. S. C. § 2244(b). This limitation was quickly upheld as constitutional, see *Felker* v. *Turpin*, 518 U. S. 651, 664 (1996), and it has largely been enforced as intended. However, various other procedural devices have been used to defeat the intent of Congress and create new rounds of litigation after the normal end of the first habeas petition. Motions for relief under Federal Rule of Civil Procedure 60(b), once rare in habeas cases, have become common. See generally, *Gonzalez* v. *Crosby*, 545 U. S. 524 (2005). *Nelson* v. *Campbell*, 541 U. S. 637, 646-647 (2004), and *Hill* v. *McDonough*, 547 U. S. 573 (2006), authorized method-of-execution claims under 42 U. S. C. § 1983. Stays of execution have been granted in such suits, even where the precedent of *Gomez* v. *United States Dist. Court for Northern Dist. of Cal.*, 503 U. S. 653, 653-654 (1992) (*per curiam*) seems to forbid such a stay. See, *e.g.*, *Berry* v. *Epps*, No. 07-7348, Order of Oct. 30, 2007. This must not become a recurring nightmare. The reasons that Congress sought to end repetitive litiga-

tion in capital cases are as compelling now as they were when Congress enacted AEDPA.

First, in many capital cases the victims' families have already waited far too long for justice by the time the first federal habeas petition finally grinds to its conclusion. Petitioner Baze murdered Sheriff Bennett and Deputy Briscoe in 1992, and his conviction and sentence were affirmed within five years, see *Baze* v. *Commonwealth*, 965 S. W. 2d 817, 825 (Ky. 1997), but it was another eight years before denial of federal habeas was final, a total of 13 years after the crime. See *Baze* v. *Parker*, 544 U. S. 931 (2005). Petitioner Bowling murdered Eddie and Tina Earley in 1990, see *Bowling* v. *Commonwealth*, 873 S. W. 2d 175, 176 (Ky. 1993), but it was 15 years before his habeas proceedings were finally over. See *Bowling* v. *Kentucky*, 546 U. S. 1017 (2005).

While execution of the perpetrator can never repair the damage he has done, there a sense of relief that justice has been done, that the perpetrator has paid the penalty finally and irrevocably, and that there is no possibility that he will escape with a punishment less than death. See, *e.g.*, Levine, Maryland Executes Oken, Washington Post, June 18, 2004, p. A1 (quoting families of victims). Due process of law requires that executions be postponed for extended periods, but the period is already too extended with direct appeal, state collateral review, and federal habeas. Every day of delay is an incremental denial of justice. Last year, Congress extended to federal habeas corpus proceedings the right of victims to proceedings "that are free from unreasonable delay." See 18 U. S. C. §§ 3771(a)(7), (b)(2). That right would be defeated if civil method-of-execution suits are used to further delay already long-delayed executions on a regular or recurring basis.

Second, the retribution interest of society as a whole is impaired by delays in the execution of capital sentences. A sentence of death is a finding that the defendant is not only a murderer but substantially more vile than the norm. He is one for whom a sentence of life imprisonment is an inadequate punishment and who is required to pay for his crime with his own life. The longer that judgment goes unexecuted, the closer the actual sentence gets to life imprisonment. In extreme cases, delays work a *de facto* commutation, and the murderer lives out his natural life span on death row. Gerald Gallego was sentenced to death in two states for four murders on top of numerous kidnapping and sex crimes. Yet this exemplar for the death penalty received an undeserved *de facto* commutation through delay and died of natural causes. See Taylor, "Sex Slave" Killer Dies of Cancer in Nevada Hospital, San Francisco Chronicle, July 20, 2002, p. A15.

Third, there is substantial empirical reason to believe that the deterrent value of capital punishment is diminished by delay, thereby costing innocent lives. See Shepherd, Murders of Passion, Execution Delays, and the Deterrence of Capital Punishment, 33 J. Legal Studies 283 (2004). Because a challenge to a method of execution can result in a statewide or even a nationwide *de facto* moratorium, the studies on effects of moratoriums provide chilling statistics. Cloninger and Marchesini, Execution and Deterrence: A Quasi-controlled Group Experiment, 33 Applied Econ. 569, 575 (2001), estimated that a one-year halt in Texas resulted in 221 additional murders. The same scholars estimated that the Illinois moratorium resulted in the murders of 150 people. Cloninger & Marchesini, Execution Moratoriums, Commutations and Deterrence: The Case of Illinois, 38 Applied Econ. 967, 971 (2006).

If the econometric deterrence studies are correct,[2] the *de facto* moratorium created by the present litigation is killing innocent people. The risk that it is doing so is much more than "significant." Cf. Brief for Petitioner 28. The risk is grave. This scenario must not be repeated.

B. The Political Balance.

Repeatedly moving the goal posts in constitutional law has a serious, adverse impact on the right of the people to govern themselves through the democratic process. The model of a bicameral legislature with executive veto created for the federal government, see U. S. Const., Art. I, § 7, and copied in most states was intentionally created to make legislation difficult, because the legislature was considered the most dangerous branch. See The Federalist No. 48, p. 309 (C. Rossiter ed. 1961) (J. Madison); *id.*, No. 62, pp. 378-379 (J. Madison). A minority which cannot enact its view into law can sometimes block legislation. Once legislation has been enacted, though, the constitutional design requires that it remain the law until it is repealed. The majority should not have to repeatedly jump the enactment hurdle to maintain a law in effect.

Yet that is exactly what happens when courts move the goal posts so as to render unconstitutional a law that conformed to the understanding of the Constitution at the time the law was enacted. We have seen this effect already with regard to the mandatory versus

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2. The deterrence debate is not yet conclusively resolved and may never be. See, *e.g.*, Liptak, Does Death Penalty Save Lives? A New Debate, New York Times, Nov. 18, 2007, p. 1. However, a strong preponderance of the recent peer-reviewed literature confirms a deterrent effect. Abstracts and citations are collected at CJLF, Articles on Death Penalty Deterrence, http://www.cjlf.org/deathpenalty/DPDeterrence.htm.

discretionary capital sentencing law. See *McGautha* v. *California*, 402 U. S. 183, 207 (1971) (fully discretionary sentencing does not violate *anything* in the Constitution); *Furman* v. *Georgia*, 408 U. S. 238 (1972) (fully discretionary sentencing laws are unconstitutional); *Woodson* v. *North Carolina*, 428 U. S. 280, 302 (1976) (lead opinion) (mandatory sentencing laws are unconstitutional).

The present case does not involve a challenge to lethal injection as such. Whether any state's death penalty law would have to be reenacted at this time if petitioner's position were adopted depends on the specific terms of the decision and the statute. In any event, though, the creation of a mobile goal post based on alternatives available at any given time raises the specter that all the statutes providing for lethal injection could be rendered unconstitutional in the future when a court decides that a better method has become available. The people of three-quarters of the states have chosen to have capital punishment, and they enacted lethal injection statutes on the assurance of the experts that it was the best method. See *Gomez* v. *United States Dist. Court for Northern Dist. of Cal.*, 503 U. S. 653, 656 (1992) (Stevens, J., dissenting). That decision should not be placed in jeopardy with a requirement of continuing statutory maintenance.

II. States need not use the method with the least pain or the least risk, so long as the method used is not cruel.

A. No Right to A Completely Painless Death.

This case is about punishment, not medical treatment. Petitioners Baze and Bowling are not medical patients undergoing surgery needed for their health. They are not animals who must be euthanized

due to circumstances beyond their control. The purpose of the procedure in question is to *punish* them for the exceptionally brutal crimes they *chose* to commit.

Some of the testimony of Petitioners' expert, Dr. Heath, reads as if he stumbled into the wrong courtroom and thought he was in a medical malpractice case. Standards of medical practice for surgery have no direct relevance to punishment. If an inadequately anesthetized patient suffers pain during surgery, it would be no defense to a malpractice action or professional discipline that the procedure was "not cruel," but whether this procedure is cruel is the only issue in the present case.

As a punishment for the very worst crimes, execution is not required to be a "well death," which is what "euthanasia" means. See Brief of Drs. Concannon et al. as *Amici Curiae* 3. Indeed, many people believe that death by lethal injection is too good already. "The only problem is Steven Oken died in peace, my daughter didn't have the luxury to die in peace, as I saw Steven Oken die tonight." Betty Romano, quoted in Levine, Maryland Executes Oken, Washington Post, June 18, 2004, p. A1. Medical standards of practice and the Cruel and Unusual Punishment Clause are related, as they both deal with pain, but they are not the same.

Petitioner blithely asserts "there is today an undeniable 'national consensus' that executions must be essentially painless," Brief for Petitioner 39 (citing *Roper* v. *Simmons*, 543 U. S. 551, 564 (2005)). On the contrary, the existence of such a consensus is quite deniable. The jurisdiction-counting method of *Roper* and *Atkins* v. *Virginia*, 536 U. S. 304, 313-316 (2002) assumes that state legislatures limit sentences based on their view of what is inherently a just punishment for a particular class of crime or criminal. In the case of methods of execution, however, this assumption is

doubtful. The nationwide change to lethal injection was motivated at least as much by a desire to end the litigation over the previous methods and the attendant delays as it was by actual desire to abandon the old methods.

In California, the change to lethal injection was motivated primarily by the debacle surrounding the execution of Robert Alton Harris. After litigating four federal habeas petitions, Harris brought a § 1983 action claiming execution by lethal gas was unconstitutional. The Ninth Circuit granted a stay, and this Court vacated it. "This claim could have been brought more than a decade ago. There is no good reason for this abusive delay, which has been compounded by last-minute attempts to manipulate the judicial process." *Gomez* v. *United States Dist. Court for Northern Dist. of Cal.*, 503 U. S. 653, 654 (1992) (*per curiam*). Then, beyond belief, a circuit judge issued another stay, see Lungren & Krotoski, Public Policy Lessons from the Robert Alton Harris Case, 40 UCLA L. Rev. 295, 325 (1992), requiring an extraordinary order from this Court not only vacating the stay but forbidding any further stays by any other federal court. See *Vasquez* v. *Harris*, 503 U. S. 1000 (1992) (A-768). That final stay, according to the eyewitness account of the father of one of the victims, "robbed Harris of his mental preparation and dignity." Baker, Justice Not Revenge: A Crime Victim's Perspective on Capital Punishment, 40 UCLA L. Rev. 339, 341 (1992).

Lethal injection legislation was introduced the next day. The bill's author "said he advanced the bill not as a more humane way to carry out a death sentence but rather as a way to eliminate legal challenges that cyanide gas is an unconstitutionally cruel and unusual punishment." Ingram, Legislators Press for Change to Lethal Injection, Los Angeles Times, Apr. 22,

1992, p. A11, col. 3. The bill was promptly enacted and signed. " 'Affording condemned inmates the choice of execution method will help prevent the type of last-minute legal circus we unfortunately witnessed with the Robert Alton Harris execution,' [Gov.] Wilson said in signing the bill." Hoover, Injection OKd as Alternative Death Penalty, San Francisco Chronicle, Aug. 29, 1992, pp. A1, A19.

This legislation provides no basis for an assertion that an anesthetized death for murderers is now a national consensus. This is anti-delay legislation. Its purpose was to take executions outside the "margin of litigation."[3]

In Petitioners' view, the Eighth Amendment is not only a rachet but an automatic rachet. Every time the states collectively move to a new method of execution, the Eighth Amendment minimum automatically ratchets up to preclude a return to previously constitutional methods. The right of the people to decide these issues democratically should not be so severely constrained. The people should be able to make revisions "in light of further experience." *Rhodes* v. *Chapman*, 452 U. S. 337, 351 (1981).

Thirteen states still provide for the use of prior execution methods as an alternative. See Brief for Respondents 5. Whether execution by cyanide gas is cruel remains debatable, see Baker, 40 UCLA L. Rev., at 342 (witness to Robert Alton Harris execution), but in any case the gas chamber would not be cruel if it were adapted to use a different gas. See American

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3. The later phrase was coined by John Fund after *Bush* v. *Gore*, 531 U. S. 98 (2000), referring to the margin by which a candidate must win to not only win the election, but also deter any postelection legal challenge. See J. Fund, Stealing Elections 4 (2004).

Veterinary Medical Assn., AVMA Guidelines on Euthanasia 9 (June 2007) (nitrogen or argon used to displace oxygen "conditionally acceptable"); *id.*, at 10 (carbon monoxide acceptable with certain precautions), available at http://www.avma.org/issues/animal_welfare/euthanasia.pdf. In a case such as *Nelson* v. *Campbell*, 541 U. S. 637, 640-641 (2004), where intravenous injection is particularly problematic, these gases might be better, even though not completely painless.

The state should be able to adopt a method of execution that gives it a clear margin above the constitutional minimum so that the constitutionality is clear, the method used will not be litigated, no stays will be granted, and the method need not be changed unless and until the state chooses to change it. No margin is possible if the margin automatically disappears because every new consensus becomes *per se* the new constitutional minimum.

In *Wilkerson* v. *Utah*, 99 U. S. 130, 134-135 (1879), the Court noted, "Cruel and unusual punishments are forbidden by the Constitution, but the authorities referred to are quite sufficient to show that the punishment of shooting as a mode of executing the death penalty for the crime of murder in the first degree is not included in that category."[4] The *Wilkerson* Court declined to precisely define cruel and punishment, but torture was clearly on one side of the line, see *id.*, at 135-136, and shooting was clearly on the other. See *id.*, at 136-137. *In re Kemmler*, 136 U. S. 436, 447 (1890), described cruel punishments as those "involv-[ing] torture or a lingering death." A completely

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4. Utah was a territory at this time, so the case presented no "incorporation" problem. Cf. *In re Kemmler*, 136 U. S. 436, 448-449 (1890).

painless death was not required then, and it is not required now.

In a relatively recent decision, the Ninth Circuit en banc upheld hanging against an Eighth Amendment challenge. See *Campbell* v. *Wood*, 18 F. 3d 662, 682-683 (1994), cert. and stay denied, 511 U. S. 1119 (1994). Relying on *Kemmler*'s "torture or lingering death" language, *Campbell* held, "We do not consider hanging to be cruel and unusual simply because it causes death, or because there may be some pain associated with death." *Id.*, at 683.

Hanging can cause death by several different modes. If it causes death by asphyxiation, it would cause loss of consciousness in no more than two minutes, with other modes involving less pain and more rapid unconsciousness. See *id.*, at 684. A slight risk of death by asphyxiation was insufficient to render hanging unconstitutionally cruel. See *id.*, at 687. The availability of the alternative of lethal injection was irrelevant. See *ibid.*

Challenges to the gas chamber were rejected many times by many courts in the 1980s and 1990s, even though this method does involve some pain when cyanide is the gas used. See *Hunt* v. *Nuth*, 57 F. 3d 1327, 1338 (CA4 1995) (collecting cases). In *Fierro* v. *Gomez*, 77 F. 3d 301, 304 (1996), the Ninth Circuit held the method unconstitutional, contrary to all the other decisions, but that decision was vacated by this Court after California changed its method. See *Gomez* v. *Fierro*, 519 U. S. 918 (1996); see also *Fierro* v. *Terhune*,

147 F. 3d 1158 (CA9 1998) (plaintiffs lack standing after statutory change).[5]

Given that execution by cyanide gas is at the margin where courts disagree and most courts have upheld it, there clearly is no requirement that the execution of the death penalty be completely painless. Even in *Fierro*, the holding was based on factual findings that the pain would be intense and "that there exists a *substantial* risk that this pain will last for several minutes." 77 F. 3d, at 308 (emphasis added). Even the outlier *Fierro* decision does not hold a method is unconstitutional because it involves some amount of pain, if that pain is not intense, if it does not last long, or if the risk of both is less than substantial.

Petitioners' contention that the Constitution *requires* an "essentially painless" or "anesthetized death," Brief for Petitioners 39, should be emphatically rejected. Not only is this pertinent to the resolution of the present case, but it is needed to clear the constitutional doubt for those states that wish to replace lethal injection and dispense with the unseemly medicalization of capital punishment that this method has wrought.

The replacement of the gas chamber with lethal injection was a mistake prompted by the belief that the change was necessary to continue capital punishment, a belief for which this Court is partly responsible. See *Gomez* v. *United States Dist. Court for Northern Dist. of Cal.*, 503 U. S. 653, 656 (1992) (Stevens, J., dissenting) (gas chamber is unconstitutional given unanimous expert opinion of superiority of lethal injection). A return to the gas chamber with a different gas, see

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5. As a vacated decision, *Fierro* v. *Gomez* has no stature as precedent. See *United States* v. *Munsingwear, Inc.*, 340 U. S. 36, 39-40 (1950).

supra at 13, would be salutary policy, but a legislature cannot risk the change if some minor discomfort from these gases or the fact that they are not anesthetics is considered to raise a doubt as to their constitutionality.

At one point in their brief, petitioners concede that only *severe* pain raises an Eighth Amendment issue in the context of execution of the death penalty. See Brief for Petitioners 38. *Amicus* CJLF believes that is correct. Our society has not yet become so squeamish that we recoil at the thought of any pain at all. Pain is a fact of life. Pain from illnesses and accidents is a common occurrence. People voluntarily incur various levels of pain to engage in athletics or to bear children. Pain which is moderate in intensity and brief in duration is not cruel when it is an incidental byproduct of a proportionate punishment for the very worst crimes.

The Eighth Amendment requires that the death penalty be carried out in a way that it does not impose severe, prolonged pain. It does not require complete painlessness or anesthesia. The suggestion that it does should be expressly rejected.

B. The Standard of Risk.

Petitioners claim that the Kentucky courts erred in applying a test of "substantial" risk, see Brief for Petitioners 41, yet they concede that the risk must be "significant" to raise a constitutional issue. See *id.*, at 39-40. This may be a distinction without a difference. The definitions of these terms in American Heritage Dictionary 1679, 1791 (3d ed. 1992) (italics in original), deleting the clearly inapposite ones, are:

> "**significant** . . . 1. Having or expressing a meaning; meaningful . . . . 3. Having or likely to have a major effect; important: *a significant*

> *change in the tax laws.* 4. Fairly large in amount or quantity: *significant casualties.*
>
> "**substantial** . . . 1. Of, relating to, or having a substance; material. 2. True or real; not imaginary. . . . 5. Considerable in importance, value, degree, amount, or extent: *won by a substantial margin.*"

The two terms are essentially synonymous as applied here. As this Court has noted many times, differing verbal formulations often make no practical difference in outcomes. See, *e.g.*, *Honda Motor Co.* v. *Oberg*, 512 U. S. 415, 432, n. 10 (1994); *Strickland* v. *Washington*, 466 U. S. 668, 696 (1984).

However, the words chosen to express a standard can have an impact on the way people think about it. Even though petitioners concede that a risk that is not significant is not a violation, they ask this Court to adopt a formula of "unnecessary risk," dropping the words "and wanton" from the usual expression of the Eighth Amendment standard. See *Gregg* v. *Georgia*, 428 U. S. 153, 173 (1976) (lead opn.); *Nelson* v. *Campbell*, 541 U. S. 637, 645 (2004); *Hope* v. *Pelzer*, 536 U. S. 730, 737 (2002); *Campbell* v. *Wood*, 18 F. 3d, at 682, n. 11 (quoting *Gregg*). The word "wanton" is in the standard for a reason, and it is not expendable.

The words "necessary" and "unnecessary" are elastic, and used alone "unnecessary" would create too much leeway for a court to declare one method of execution unconstitutional merely because it found another was better. If the word is used strictly, even a very remote chance of pain would be "unnecessary" if some other method, however difficult and expensive, had a lower chance. Petitioners disclaim such a strict usage, saying they mean only "significant" risks, but

unnecessarily using the word "unnecessary" alone runs a significant risk of misinterpretation.

The element of wantonness was discussed at some length in *Wilson* v. *Seiter*, 501 U. S. 294, 296-302 (1991). It includes a subjective element. Absent an intent to inflict pain, wantonness requires "deliberate indifference." See *id.*, at 297. The deliberate indifference standard was applied in *Helling* v. *McKinney*, 509 U. S. 25, 35 (1993), a case that, like this one, involved a risk and not a certainty. McKinney's claim was that prior officials had "with deliberate indifference, exposed him to levels of [second-hand smoke] that pose an unreasonable risk of serious damage to his future health." *Ibid.* The analogous claim in this case would be deliberate indifference to an unreasonable risk of severe and prolonged pain in execution.

The question is not what problems have occurred in the past, but whether respondents are deliberately indifferent to an unreasonable risk today. See *id.*, at 36-37. Only in recent years have problems with lethal injection, previously touted as the humane alternative, see *supra*, at 15, come to light. In response, the Kentucky officials have reconsidered and revised their procedures. The reasons why the revision meets constitutional standards are discussed in the opinion of the Kentucky Supreme Court and the Brief for Respondents and need not be repeated here. However, if the Court should decide that further refinement is needed, *amicus* submits that only one more step is required. The consciousness check after the injection of the thiopental as implemented in Florida and Missouri is more than sufficient to reduce the risk of severe, prolonged pain below the threshold of Eighth Amendment concern.

III. At most, the consciousness check procedure used in Florida and Missouri is all that is required.

Petitioners ask this Court to examine "the degree of risk of severe pain caused by the cumulative effect of all [of the Kentucky protocol's] deficiencies, combined with the danger created by the use of personnel who are unequipped to prevent or correct these foreseeable problems." Brief for Petitioners 43. In its examination, Petitioners urge this Court to consider alternatives that if adopted, could reasonably prevent the risk of pain. *Id.*, at 51-59. Should this Court find that a modification of the existing Kentucky protocol is required, *amicus* CJLF submits that the only modification needed is a physical check of consciousness after the administration of sodium thiopental, without a requirement of physician participation, similar to the procedures adopted in Florida and Missouri.

State and federal courts have found, based on expert opinion, that when properly administered, a 2.5 to 5 gram dose of sodium thiopental will render an inmate unconscious and insensate within seconds and leave him unable to perceive pain. See *Taylor* v. *Crawford*, 487 F. 3d 1072, 1076 (CA8 2007) (citing Heath testimony); see also Testimony of Dr. Kris Sperry, *Lightbourne v. McCollum*, No. 81-170-CF (5th Jud. Cir. Fla., 2007), p. 2333 ("*Lightbourne* Record"), available at http://www.cjlf.org/files/LightbourneRecord.pdf. Therefore, if a state's lethal injection protocol contains a procedure to check whether the inmate quickly becomes unconscious from the thiopental, then the inmate is adequately protected from experiencing the physical sensation of pain for far longer than the brief time that it takes to administer the other two drugs. See J. A. 547-548, 631 (testimony of Dr. Dershwitz, unconscious for hours). The inmate is adequately

protected because pancuronium bromide and potassium chloride can only cause extreme pain if administered without proper anesthesia. Brief for Petitioners 43-44.

A. A Physical Check for Consciousness.

Each time a district court has held an evidentiary hearing to determine whether the state's lethal injection procedure submits an inmate to an unconstitutional risk of pain and suffering, both plaintiffs and defendants present expert opinion as to whether the state protocol insures the inmate will be unconscious before pancuronium bromide or potassium chloride are administered. See *Lightbourne* v. *McCollum*, No. SC06-2391 (Fla., Nov. 1, 2007), pp. 37-38; see also *Taylor* v. *Crawford*, 487 F. 3d, at 1075-77; *Workman* v. *Bredesen*, 486 F. 3d 896, 910 (CA6 2007).

The testimony of the state's expert witness in the present case was that if the massive dose of thiopental goes into the vein, as it should, "the person will lose consciousness in less than a minute, and the thiopental is a painless injection." J. A. 601. On the other hand, "[i]f the thiopental were to go into any tissue site other than a vein, the inmate would not lose consciousness, and they would be in extreme pain; they would scream out." J. A. 601.

Given the dose used here, far in excess of that used in surgery, a lay person's observation of rapid unconsciousness is sufficient to reduce the chance of inadequate anesthesia to minimal levels. The anesthesia awareness cases that happen in surgery involve doses of only one-tenth of that used in lethal injection. See J. A. 592-593, 630.

In the recent Florida case, Dr. Kris Sperry, the Chief Medical Examiner for the State of Georgia, testified that a "basic neurological assessment of

consciousness and responsiveness" could be conducted by approaching a person, placing hands on the person, and then calling their name and shaking them. This assessment does not require medical training and can be taught to a lay person. *Lightbourne* Record, at 2353 (stating basic assessment of consciousness can be conducted by ". . . any type of paramedic, EMT, anyone or nurse, LPN, anybody . . . that has any type of patient contact would have that kind of basic knowledge").

In the same proceeding, Dr. Mark Dershwitz, the same expert who testified in the present case, testified that "persons other than medical professionals," could be taught how to assess whether someone was unconscious when learning BLS or CPR. Testimony of Dr. Mark Dershwitz, *Lightbourne* Record, at p. 512. In this context, a lay person could be taught to determine consciousness by approaching a person who appeared to be unconscious, shaking him and calling his name. *Ibid.* While the assessment does not assess the "depth of anesthesia," *id.*, at 517, Dr. Dershwitz testified that, "consciousness in this context is an all or none thing, like pregnancy. You are either conscious or unconscious. And lay people can be readily trained to determine if somebody is unconscious." *Id.*, at 518. Thus, while "depth of anesthesia" requires an expert, who will continually monitor "objective signs" to determine "how deeply anaesthetized a particular person is," *ibid.*, monitoring is only necessary when it is proper medical procedure to "ensure a patient will wake up at the end of the procedure." *Taylor*, 487 F. 3d, at 1084. Expert monitoring is not, and should not become, customary in an execution when it is not intended that the inmate wake up at the end of the procedure.

B. The Florida Decision.

Florida has gone to considerable lengths to create a lethal injection protocol to minimize the risk of pain. See *Lightbourne* v. *McCollum*, No. SC06-2391 (Fla., Nov. 1, 2007).

After the execution of Angel Diaz, Florida took it upon itself to investigate and create a written lethal injection protocol that would address and correct the recently discovered problems. See *id.*, at 4-5. The protocol developed by Florida stated the process of assessing consciousness was a "critical step" that must be conducted before pancuronium bromide and potassium chloride are injected. *Id.*, at 41-42. Under the Florida protocol, the warden must " 'assess whether the inmate is unconscious' " before the warden may authorize the execution to continue with the second and third chemicals. See *id.*, at 42.

While Florida's protocol does not specify what procedure the warden must use to determine consciousness, *id.*, at 42, n. 21, the Florida Supreme Court held that Warden Cannon, a lay person with basic CPR training, was qualified to test whether an inmate remained conscious after the initial dose of sodium thiopental. *Id.*, at 47-48. This test of consciousness would be carried out "by employing an 'eyelash touch,' calling the inmate's name, and shaking the inmate." *Id.*, at 42. This basic test was held to be all that was necessary to alleviate the risk that the inmate might be conscious as the second or third drugs are administered. *Id.*, at 48.

The Florida Supreme Court reasoned that although the warden did not have any training beyond basic CPR, the fact that the protocol required the warden to make a consciousness assessment in consultation with other team members adequately protected

the inmate from an Eighth Amendment violation. *Id.*, at 48. "If the inmate's consciousness is appropriately assessed and monitored after the dosage of sodium thiopental is administered, he or she will not suffer any pain from the injection of the remaining drugs." *Id.*, at 51. By any standard, the risk at that point is below the threshold of an Eighth Amendment violation. See *ibid.*

C. Doctor Participation Not Required.

When examining Kentucky's lethal injection protocol, this Court should be careful to avoid reading the Constitution to create a requirement that a physician participate in lethal injection. Requiring a physician to participate in lethal injection procedures will create a legal Catch-22,[6] where physicians are required to participate, but their professional code of ethics prohibits their participation. This could halt all executions by lethal injection in the United States.

The murderer *amici* assert that "there is no shortage of doctors . . . who express a willingness to participate in lethal injection executions." Brief for Michael Morales, et al., as *Amici Curiae* 6-7. In fact, it was a court-imposed requirement of physician participation that blocked justice in *amicus* Morales' own case when the physicians could not participate to the extent required by the court. See *Morales* v. *Tilton*, 465 F. Supp. 2d 972, 976-977 (ND Cal. 2006). A year later, Morales' punishment for the cold-blooded murder of 17-year-old Terri Winchell remains unexecuted. In North Carolina, the state medical board has threatened the

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6. In the satirical novel of that name, a pilot who sought to be excused from hazardous missions on psychiatric grounds had to make a request, but the request was deemed proof of a rational mind, so the request would be denied. J. Heller, Catch-22 (1961).

professional licenses of physicians who participate in executions, a matter which remains in litigation. See *North Carolina Dept. of Corrections* v. *North Carolina Medical Board*, Wake County (NC) Superior Court No. 07-CVS-3574, Order of Oct. 1, 2007, appeal pending.

Although some medical professionals have expressed a willingness to participate in the past, once attacks like the one in North Carolina begin, the pool will evaporate quickly. The mere accusation of unethical conduct is a stain on one's reputation and a drain on one's time, energy, and finances, even if the person is completely vindicated. Convincing courts to require doctor participation and then attacking the doctors is part of the cynical Catch-22 strategy that has served the anti-death-penalty movement so well in the past. Cf. *Walton* v. *Arizona*, 497 U. S. 639, 656 (1990) (Scalia, J., concurring in part and concurring in the judgment), overruled in part on other grounds in *Ring* v. *Arizona*, 536 U. S. 584 (2002) (simultaneous arguments of too little and too much discretion). The Eighth Circuit in *Taylor* correctly rejected this gambit.

In *Taylor* v. *Crawford*, the Eighth Circuit reversed the district court's holding that Missouri's proposed written lethal injection protocol "was still inadequate to provide sufficient constitutional protections." *Taylor*, 487 F. 3d, at 1078. After hearing expert testimony, and the testimony of a physician who had participated in Missouri's most recent execution, the district court had concluded that Missouri's lethal injection protocol "subjects condemned inmates to an unnecessary risk that they will be subject to unconstitutional pain and suffering . . . ." *Taylor* v. *Crawford*, No. 05-4173-CV-C-FJG, Order of June 26, 2006, U. S. Dist. LEXIS 42949 (typed op., at 13).

The district court ordered the Department of Corrections to prepare a written protocol for lethal

injection that would require a board certified anesthesiologist to actively participate in the execution procedure. *Id.*, at 14. The anesthesiologist would be required to mix all the drugs used in lethal injection and directly observe the individuals who administered the drugs through an IV. *Ibid.* The anesthesiologist would also be required to monitor the anesthetic depth of the inmate and certify sufficient anesthetic depth had been achieved before potassium chloride was administered. *Ibid.*

These requirements were in conflict with the American Medical Association's code of ethics, which does not allow physician participation in a legally authorized execution. "In the case where the method of execution is lethal injection, the following actions by a physician would also constitute physician participation in execution: selecting injection sites; starting intravenous lines as a port for a lethal injection device; prescribing, preparing, administering, or supervising injection drugs or their doses or types; inspecting, testing, or maintaining lethal injection devices; and consulting with or supervising lethal injection personnel." American Medical Association, Code of Medical Ethics, E-2.06 (2007). This position has been adopted by the American Society of Anesthesioligists. See Message from the President: Observations Regarding Lethal Injection, available at http://www.asahq.org/news/asanews063006.htm (June 30, 2006).

After a review of the record, the Eighth Circuit concluded participation of an anesthesiologist was not necessary. "Neither does the record justify requiring the continuous monitoring of the anesthetic depth of the inmate by one trained in anesthesia or by additional equipment." *Taylor*, 487 F. 3d, at 1084. The Eighth Circuit's decision was based on the standard that the pain of punishment can only be constitutionally signifi-

cant if the process of carrying out lethal injection involves "the unnecessary and wanton infliction of pain." *Id.*, at 1079. Missouri's proposed written protocol did not create such a risk. *Id.*, at 1083. Thus, the district court had no basis to order an anesthesiologist that would monitor consciousness. See *ibid.*

The Eighth Circuit found Missouri's protocol sufficient, in part because "experts agree that if a 5-gram dose of thiopental is successfully delivered, there is virtually no risk that an inmate will suffer pain through Missouri's three-chemical sequence." *Id.*, at 1083. Therefore, a requirement that the prisoner be physically examined, not necessarily by a physician, by using "standard clinical techniques to determine that he is unconscious before the second and third chemicals are administered" met Eighth Amendment requirements. *Id.*, at 1084. "Given the dose of thiopental provided in the protocol, the precautions taken to ensure it is successfully delivered, . . . and the physical examination of the prisoner and the IV site prior to administering the second and third chemicals, there is simply no realistic need for further monitoring of anesthetic depth by a physician or sophisticated equipment to prevent a constitutionally significant risk of pain." *Ibid.*

The Constitution does not require the use of execution procedures that may be medically optimal in clinical settings. *Ibid.*; see also *Hamilton* v. *Jones*, 472 F. 3d 814, 816 (CA10 2007), cert. denied, 127 S. Ct. 1054, 166 L. Ed. 2d 783 (2007). So long as a state has chosen procedures for conducting an execution that are "designed to ensure a quick, indeed a painless, death, . . . there is no need for the continuing, careful, watchful eye of an anesthesiologist . . ." or equipment designed to monitor consciousness. See *Taylor*, 487 F. 3d, at 1084. At most, the Constitution requires that there

be a check that the sodium thiopental was successfully delivered to the inmate. Once such a check has been completed, and the inmate is determined to be unconscious, the State's burden to prevent "unnecessary and wanton infliction of pain" has been satisfied.

CONCLUSION

The decision of the Supreme Court of Kentucky should be affirmed. Alternatively, if a remand is deemed necessary, the only change required should be the addition of a consciousness check of the kind found sufficient in *Taylor* and *Lightbourne*.

December, 2007

Respectfully submitted,

KENT S. SCHEIDEGGER

Attorney for Amicus Curiae
Criminal Justice Legal Foundation

JOINT APPENDIX

COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
CIVIL ACTION NO. 04-CI-01094

RALPH BAZE AND
THOMAS C. BOWLING — PLAINTIFFS

Relevant Docket Entries

JOHN D. REES, COMMISSIONER
KENTUCKY DEPARTMENT OF CORRECTIONS;
GLENN HAEBERLIN, WARDEN KENTUCKY
STATE PENITENTIARY; AND
HON. ERNIE FLETCHER, GOVERNOR
OF KENTUCKY — DEFENDANTS

08/09/2004 Complaint for Declaratory Judgment and Injunctive Relief

08/09/2004 Memorandum in support of complaint on Lethal Injection

8/09/2004 Volume I of Exhibits to Complaint on Lethal Injection

08/09/2004 Volume II of Exhibits to Complaint on Lethal Injection

8/10/2004 Motion for Emergency Hearing re: Discovery and Scheduling

9/3/2004 Motion for Restraining Order

9/3/2004 Response to Defendants' Motion to Dismiss Complaint

9/8/2004 Defendants' Response to Discovery Motions

9/9/2004 Motion to Dismiss Amended Complaint

9/27/2004 Motion for Discovery and Inspection

10/13/2004 Order Requiring Defendant to produce redacted protocol

10/13/2004 Order on Defendant's Motion to Dismiss

10/15/2004 Defendant's Objection to Depositions and Motion for Protective Order

10/20/2004 Defendants' Objections to Disclosure of Portions of Execution Protocol

10/25/2004 Order that Redacted Copy of Execution Protocol be given to Plaintiffs

10/26/2004 Defendants' Answer to Complaint

11/05/2004 Motion to Compel Discovery

11/12/2004 Motion for Temporary Injunction Barring Execution of Thomas Bowling

11/18/2004 Defendants' Response to Motion for Temporary Injunction

11/18/2004 Plaintiffs' Reply to Response for Motion for Temporary Injunction

11/23/2004 Opinion Granting Temporary Injunction Barring Bowling's Execution

1/26/2005 Plaintiffs Response to use of Video Testimony of Dr. Dershwitz

1/27/2005 Defendants' Answer to Second Request for Production of Documents

1/27/2005 Defendants' Answer to Second Set of Interrogatories

2/7/2005 Order allowing Defendants to use Dr. Dershwitz as expert.

2/7/2005 Order excluding certain Plaintiff experts from testifying

2/7/2005 Order Denying Defendant's motion to use video testimony

2/7/2005 Renewed Motion to Depose Execution Team

2/7/2005 Order Denying Motion to Compel Execution Team Depositions

2/8/2005 Affidavit of Dr. Mark Dershwitz

3/14/2005 Motion for Discovery and Inspection

3/14/2005 Plaintiffs' Motion for Production and Interrogatories regarding Defendants' Witnesses

4/11/2005 Defendants' Response to Plaintiffs' Third Production Request

5/20/2005 Plaintiffs' Post Trial Brief

5/20/2005 Defendants' Post Trial Brief

7/8/2005 Final Judgment: Findings of Fact and Conclusions of Law

SUPREME COURT OF KENTUCKY
2005-SC-0543-MR

RALPH BAZE AND
THOMAS C. BOWLING — APPELLANTS

APPEAL FROM FRANKLIN CIRCUIT COURT
HONORABLE ROGER CRITTENDEN, JUDGE
2004-CI-01094

JOHN D. REES, COMMISSIONER
KENTUCKY DEPARTMENT OF CORRECTIONS;
GLENN HAEBERLIN, WARDEN KENTUCKY
STATE PENITENTIARY; AND
HON. ERNIE FLETCHER, GOVERNOR
OF KENTUCKY — APPELLEES

Relevant Docket Entries

7/12/2005 Notice of Appeal

10/6/2005 Brief for Appellants filed

12/22/2005 Appellee Brief Filed

5/3/2006 Motion to file Supplemental Authority re: Joseph Clark Execution

6/27/2006 Order granted allowing filing of Supplemental Authority re: Joseph Clark

11/22/2006 Opinion

12/15/2006 Motion to cite supplemental authority re: Angel Diaz pain and suffering

12/21/2006 Motion to cite supplemental authority re: preliminary Diaz autopsy report.

2/14/2007 Motion to cite supplemental authority: Angel Diaz autopsy information

4/19/2007 Order Denying Petition for rehearing

5/01/2007 Motion for Stay of Enforcement of Opinion pending certiorari

5/4/2007 Order granting stay of execution and enforcement of opinion.

COMMONWEALTH OF KENTUCKY
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PAUL E. PATTON
GOVERNOR

VERTNER L. TAYLOR
COMMISSIONER

May 14, 2002

Thomas M. Ransdell, Esq.
Asst. Public Advocate
00 Pair Oaks Lane, Suite 302
Frankfort, Kentucky 40501

RE : Execution Open Records

Dear Mr. Ransdell,

Enclosed is our Corrections Policy and Procedure 9.5 that addresses executions in Kentucky. [501 KAR 6:020, CPP 9.5] We also have some records at the Kentucky State Penitentiary that are "open" with only a few reservations regarding times when inmates might be subjected to special rules and procedures at the time of a prisoner being executed.

I list the following information from our Deputy Commissioner which will hopefully satisfy your inquiries:

1. A therapeutic dose of Valium is given prior to the execution.

2. The names, amounts and the order in which an inmate is given of lethal injection drugs are as follows:

a.	Sodium Thiopental	2 gm
b.	Saline	25 mg
c.	Pavulon	50 mg
d.	Saline	25 mg
e.	Potassium Chloride	240 mg

The drugs are injected in rapid succession "a." through "e."

3. A minimum of one needle is inserted in the inmate. Additional needles may be used if considered necessary by the execution team.

Very Truly Yours.,

/s/ John T. Damron
John T. Damron
Deputy General Counsel

JTD/j
cc: Dep. Commissioner Whitney
Warden Phil Parker

IN THE CIRCUIT COURT
FOR FRANKLIN COUNTY
COMMONWEALTH OF KENTUCKY

RALPH BAZE, and, THOMAS C. BOWLING, Plaintiffs, v. JONATHAN D. REES, Commissioner, Kentucky Department of Corrections, Frankfort, Kentucky GLENN HAEBERLIN, Warden, Kentucky State Penitentiary, Eddyville Kentucky, and, UNKNOWN EXECUTIONERS, Defendants.	CIV. ACTION 04-CI-01094

- COMPLAINT FOR DECLARATORY JUDGMENT AND INJUNCTIVE RELIEF

I. NATURE OF ACTION[1]

1. This action is brought pursuant to Kentucky Rules of Civil Procedure, Rule CR 57 (declaratory judgment), CR 65.01 (injunctive relief), and CR 65.04 (temporary injunctions) for violations and threatened violations of the right of plaintiffs to be free from cruel and unusual punishment under the Eighth Amendment of the United States Constitution ("nor shall cruel and unusual punishment be inflicted") and section 17 of the Kentucky Constitution ("nor cruel punishment inflicted"), and for violating plaintiffs' due process rights.

2. CR 57 authorizes declaratory judgment as a form of relief and explicitly states that "[t]he existence of another adequate remedy does not preclude a judgment for declaratory relief."

3. CR 65.01 authorizes a temporary injunction to "restrict or mandatorily direct the doing of an act."

4. CR 65.04 authorizes a temporary injunction "during the pendency of an action on motion if it is

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[1] Plaintiffs incorporate the attached memoranda of law and exhibits by reference. For this court's convenience, Plaintiffs submit and incorporate a separate memorandum of law concerning the electrocution claim.

clearly shown by verified complaint, affidavit, or other evidence that the movant's rights are being or will be violated by an adverse party and the movant will suffer immediate and irreparable injury, loss, or damage pending a final judgment in the action, or the acts of the adverse party will tend to render such final judgment ineffectual."

5. Defendants' current lethal injection procedure violates K.R.S. section 431.220 because the "execution procedures" do not require a continuous administration of a short acting barbiturate.

6. Defendants' current method of lethal injection will cause Plaintiffs to be tortured to death. No government within the United States may intentionally or negligently use an excruciatingly painful and unreliable procedure for carrying out executions, particularly when readily available alternative means of carrying out the sentence exist.

7. Usage of a "cut down" procedure violates both the state and federal cruel and unusual punishment clauses.

8. The usage of pancurium bromide (pavulon or also pancuronium) during a lethal injection violates the Eighth Amendment of the United States Constitution and section 17 of the Kentucky Constitution.

9. Defendants have refused to disclose the "execution procedures" to plaintiffs, in violation of fundamental notions of fairness and due process. Due process compels Defendants to disclose to plaintiffs the "execution procedures" that will be utilized in extinguishing their lives.

10. Kentucky's alternative method of execution for individuals sentenced to death prior to 1998, electrocution, violates the Eighth Amendment of the United States Constitution and section 17 of the Kentucky Constitution.

11. Plaintiffs are not saying that Defendants could never execute them. Rather, they assert that any execution must comport with K.R.S. section 431.220, the Kentucky Constitution, and the United States Constitution. Plaintiffs could be executed if: 1) no separate legal challenges reverse their convictions or death sentences; 2) Plaintiffs do not receive executive clemency; 3) Defendants' execution of Plaintiffs is conducted consistent with the manner established by the Kentucky Legislature and codified at K.R.S. section 431.220; 4) Defendants design a constitutionally acceptable method for executing Plaintiffs, which can include lethal injection if done in a manner that does not inflict unnecessary pain and suffering; and, 5) Defendants disclose their "execution procedures" in accordance with principles of due process.

12. Plaintiffs seek an Order declaring that Defendants' current "execution procedures" for lethal injection violate K.R.S. section 431.220

because the "execution procedures" do not permit a "continuous" administration of an effective barbiturate.

13. Plaintiffs also seek an Order declaring that Defendants' current method of conducting an execution by lethal injection, including utilizing pancurium bromide (pavulon), providing a low dose of sodium thiopental, utilizing a "cut down" procedure to obtain venous access, and failing to implement adequate "execution procedures" violates the cruel and unusual punishment clause of the Eighth Amendment to the United States Constitution and section 17 of the Kentucky Constitution.

14. Plaintiffs seek an Order declaring that Defendants' refusal to disclose its "execution procedures" violates due process and fundamental notions of fairness, and an Order compelling Defendants to disclose their "execution procedures" to Plaintiffs in a timely manner sufficient to allow Plaintiffs to investigate and evaluate the procedure to ensure that it does not violate section 17 of the Kentucky Constitution or the Eighth Amendment to the United States Constitution.

15. Plaintiffs seek an Order declaring that execution by electrocution violates section 17 of the Kentucky Constitution and the Eighth Amendment of the United States Constitution.

16. Plaintiffs further seek a temporary restraining order, and preliminary injunction preventing Defendants from scheduling their execution while this litigation is pending if the execution is to be carried out:

1) under the means and procedures currently employed for carrying out an execution by lethal injection in Kentucky;
2) without using a "continuous" administration of an effective barbiturate;
3) utilizing pancurium bromide; or,
4) in a manner that may involve a "cut down" procedure to obtain venous access;
5) utilizing untrained individuals to prepare and insert the needle(s) and chemicals;
6) without providing Plaintiffs with a complete copy of the execution procedures, and opportunity to be heard concerning the procedures.

II. JURISDICTION AND VENUE

17. This Court has jurisdiction pursuant to K.R.S. section 23A.010(1), which grants this Court general and original jurisdiction over all civil matters not exclusively vested in another court.

18. This action arises under the Eighth and Fourteenth Amendments of the United States Constitution, and section 17 of the Kentucky Constitution.

19. Venue is proper in Franklin County because it is where the KentuckyDepartment of Corrections' headquarters is located.

III. PLAINTIFFS

20. Ralph Baze is a United States citizen and a resident of the Commonwealth of Kentucky. He is currently a death sentenced inmate under the supervision of the Kentucky Department of Corrections. He is held at the Kentucky State Penitentiary in Eddyville, Kentucky 42038.

21. Thomas C. Bowling (T.C. Bowling) is a United States citizen and a resident of the Commonwealth of Kentucky. He is currently a death sentenced inmate under the supervision of the Kentucky Department of Corrections. He is held at the Kentucky State Penitentiary in Eddyville, Kentucky 42038.

IV. DEFENDANTS

22. Defendant John D. Rees is the Commissioner of the Kentucky Department of Corrections.

23. Defendant Glenn Haeberlin is the Warden of the Kentucky State Penitentiary, where the executions will occur.

24. Defendants Unknown Executioners are employed by or under contract with the Kentucky Department of Corrections, to make preparations for, and carry out, Plaintiffs' execution. They

include, but are not limited to, physicians, emergency medical technicians, physician's assistants, the "execution team," and the "team leader." Plaintiffs do not yet know their identities and it is Plaintiffs' understanding that Defendants will not reveal the identities of these persons.

V. FACTS

25. Plaintiff Ralph Baze's death sentence was recently affirmed by the Sixth Circuit Court of Appeals. If the Sixth Circuit (on rehearing) or the United States Supreme Court does not reverse his conviction or death sentences, his execution will be scheduled within a few months, a short period of time which requires Plaintiff to file this action now in order to provide him and this Court with adequate time to resolve the disputed issues.

26. Plaintiff Thomas C. Bowling's death sentence was affirmed by the Sixth Circuit Court of Appeals on September 17, 2003. Rehearing en banc was denied on December 30, 2003. His petition for certiorari is currently pending before the United States Supreme Court.

27. Defendants are responsible for carrying out each execution.

28. Under the Eighth Amendment to the United States Constitution, cruel and unusual punishment claims involving a particular means of effectuating a sentence of death are analyzed under a four prong

test in which any one prong is sufficient to establish an Eighth Amendment violation:

a) unnecessary infliction of pain and suffering in light of readily available alternatives;
b) the risk of unnecessary infliction of pain and suffering in light of readily available alternatives;
c) mutilation of the body during the execution;
d) whether the particular means of effectuating the sentence of death violates evolving standards of decency.

29. At a minimum, section 17 of the Kentucky Constitution applies the same standard for analyzing cruel and unusual punishment claims as the Eighth Amendment standard.

A. Facts Relevant to the Statutory Violation

30. The manner of judicial executions in Kentucky is governed by K.R.S. 431.220, which provides in relevant part that a "death sentence shall be executed by continuous intravenous injection of a substance or combination of substances sufficient to cause death."

31. The Kentucky Department of Corrections has implemented administrative procedures for carrying out executions.[2]

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[2] A 2002 letter from the Kentucky Department of Corrections stating the chemicals utilized during a lethal injection, the dose

32. Kentucky's administrative procedures for lethal injection contradict and thus violate Kentucky statutes.

33. K.R.S. section 431.220 requires the "continuous" administration of a drug or combination of drugs sufficient to cause death.

34. According to a Department of Corrections 2002 letter (exhibit 1), Defendants intend to execute Plaintiffs by administering the following drugs in the following manner:

a) sodium pentothal (2 grams) ;
b) saline (25 milligrams);
b) pavulon [also referred to as pancurium bromide] (50 milligrams);
c) saline (25 milligrams); and,
d) potassium chloride (240 milliequivalents)

The drugs are injected in rapid succession "a" through "e."

35. By injecting the drugs in rapid succession, the Department of Corrections is in violation of K.R.S. section 431.220, which requires a continuous administration of the drugs used to cause death including the short acting barbiturate (sodium pentothal).

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of these chemicals, and the order of administration, is attached as exhibit 1.

B. Facts Relevant to Unnecessary Pain and Suffering.

36. The usage of sodium thiopental is not mandated by K.R.S. section 431.220.

37. The usage of pavulon (pancurium bromide) is not mandated by K.R.S. section 431.220.

38. The usage of potassium chloride is not mandated by K.R.S. section 431.220.

39. Finding that any one, a combination of, or all these chemicals violates section 17 of the Kentucky Constitution or the Eighth Amendment to the United States Constitution will not require statutory amendment or variance.

40. Sodium thiopental (pentothal) is an ultrashort-acting barbiturate that begins to wear off almost immediately.

41. Pavulon (pancurium bromide) is a curare-derived agent that paralyzes all skeletal or voluntary muscles, but which has no affect whatsoever on awareness, cognition, or sensation.

42. Potassium chloride is an extraordinarily painful chemical which activates the nerve fibers lining a person's veins and interferes with the rhythmic contractions of the heart, causing cardiac arrest.

The chemicals utilized in lethal injections in Kentucky will cause unnecessary pain and suffering.

43. Defendants intend to execute Plaintiffs by administering the following drugs in the following manner:

a) sodium pentothal (2 grams) ;
b) saline (25 milligrams);
b) pavulon [also referred to as pancurium bromide] (50 milligrams);
c) saline (25 milligrams); and,
d) potassium chloride (240 milliequivalents)

The drugs are injected in rapid succession "a" through "e."

44. This particular combination and sequence of chemicals will cause Plaintiffs to consciously suffer an excruciatingly painful and protracted death in violation of section 17 of the Kentucky Constitution and the Eighth Amendment to the United States Constitution.

45. Sodium thiopental is a short-acting barbiturate which is ordinarily used only in the induction phase of anesthesia to render a surgical patient unconscious for mere minutes, , specifically so that the patient may re-awaken and breathe on their own power if any complications arise in inserting a breathing tube pre-surgery.

46. Sodium thiopental is never used as the only anesthetic during a surgical proceeding.

47. Because of its brief duration (usually about five to seven minutes), it is highly unlikely that sodium thiopental will provide a sedative effect throughout the entire execution process.

48. Two grams is a relatively low dosage of sodium thiopental which increases the likelihood that it will not have a sedative effect or will wear off almost immediately.

49. Two grams of sodium thiopental or any larger dose is insufficient to induce unconsciousness if the sodium thiopental does not reach the condemned prisoner's bloodstream.

50. Defendants fail to ensure that the full quantity of sodium thiopental reaches the inmate's bloodstream.

51. Defendants fail to determine if the inmate is unconscious prior to administering pavulon and potassium chloride.

52. North Carolina and South Carolina administer two grams of sodium thiopental.

53. Toxicology reports on death row inmates in North Carolina prove that at least three North Carolina death row inmates were conscious during execution by lethal injection, and another death row inmate likely was conscious during his execution.

54. Toxicology reports on death row inmates in South Carolina prove that at least three South Carolina death row inmates were conscious during execution by lethal injection, and another three death row inmates likely were conscious during execution by lethal injection.

55. Toxicology reports show that the level of thiopental in Edward Harper at the time of his execution by Defendants was between 3 mg/L and 6.5 mg/L.

56. Edward Harper likely was conscious when pavulon was administered.

57. Edward Harper likely was conscious when potassium chloride was administered.

58. Defendants have taken no precautions or corrective measures to ensure that two grams of sodium thiopental (the same dosage as has been problematic in North Carolina, South Carolina, and during the execution of Edward Harper) will reach an inmate's veins, and render the inmate unconscious.

59. In surgical procedures, the quantity of anesthetic administered depends upon factors unique to the patient including size, weight, and past drug usage.

60. In an individual who is resistant to sodium thiopental, a higher dose of sodium thiopental is necessary to induce unconsciousness.

61. An overweight person is likely to be more resistant to sodium thiopental.

62. Prolonged usage of barbiturates builds up a resistance to sodium thiopental.

63. Edward Harper presented none the above mentioned risk factors, and yet, insufficient sodium thiopental reached his bloodstream.

64. Due to the chemical combination and sequence used in the Kentucky execution process, there is a probability that the sedative effect of the sodium thiopental will be neutralized instantly by the second chemical, pavulon.

65. If Plaintiffs are not adequately sedated, they will suffer an excruciatingly painful death by suffocation.

66. The second chemical involved in the lethal injection process, Pavulon, is a derivative of curare that acts as a neuromuscular blocking agent.

67. While Pavulon paralyzes skeletal muscles, including the diaphragm, it has no effect on consciousness or the perception of pain or suffering.

68. To the extent that the first chemical, sodium pentothal, is neutralized by the second, Pavulon,

the paralytic chemical (Pavulon) will serve only to mask the excruciating pain of Plaintiffs.

69. Pavulon prevents a conscious individual from notifying anyone that he or she is conscious or pain.

70. Pavulon prevents a conscious individual from showing any signs of consciousness.

71. A condemned inmate could regain consciousness because:

1) less than the expected dose of the anesthetizing drug, thiopental, had been successfully injected into the individual's bloodstream;
2) sensitivity to thiopental varies greatly among the population and some individuals;
3) the duration of the effectiveness of thiopental wore off; OR,
4) the dose of thiopental was insufficient to render the inmate unconscious.

72. If a condemned inmate regains consciousness during an execution, the inmate will suffer excruciating pain caused by pavulon and potassium chloride.

73. Pavulon collapses the lungs and, in a conscious person, causes the extreme pain of suffocation.

74. Death by suffocation is akin to drowning.

75. Death by suffocation is akin to dying in a gas chamber.

76. Pavulon can cause individuals to have a gastric reaction that causes vomit to fill their mouths.

77. The vomit caused by the usage of pavulon can flow into a person's lungs causing suffocation.

78. Because pavulon paralyzes the diaphragm, a person is unable to regurgitate the vomit.

79. If a person is conscious when the vomit flows into the mouth, a person paralyzed by pavulon is likely to suffer extreme pain and suffering as the person silently chokes to death on vomit.

80. The American Veterinary Medicine Association (AVMA) condemns the use of neuromuscular blocking agents such as Pavulon in the euthanasia of animals.

81. At least nineteen states have made the use of pavulon on domestic animals illegal. Kentucky is one of a majority of States that have banned its use. K.R.S. section 321.181(17) and 201 K.A.R. 16:090.

82. The first lethal injection procedure designed in the United States used pavulon to cause death.

83. Potassium chloride, the third chemical involved in Kentucky's lethal injection process, is

intended to stop the prisoner's heart, and, thereby cause cardiac arrest and death.

84. With the use of potassium chloride, pavulon is not necessary to cause death.

85. Pavulon serves no legitimate purpose in a lethal injection execution, particularly considering the readily available alternative of conducting the lethal injection execution without pavulon.

86. New Jersey carries out executions utilizing only sodium thiopental and potassium chloride.

87. A chancery court in Tennessee has found the usage of pavulon during lethal injections to be arbitrary and unnecessary.

88. Pavulon is administered to make the lethal injection process more aesthetically palatable for the official witnesses by preventing the witnesses from seeing any involuntary twitching or seizures that may be caused by the potassium chloride or the dying process itself.

89. Preventing official witnesses from seeing the effects of each chemical during the lethal injection process is not a legitimate reason to administer a drug, particularly when the drug increases the risk of inflicting horrific pain and suffering upon the condemned person.

90. The use of pavulon during an execution violates evolving standards of decency.

91. The use of pavulon during an execution creates an unacceptable risk that Plaintiffs will suffer an unnecessarily painful death.

92. Potassium chloride is a strong alkaline chemical.

93. Potassium chloride is used as road salt.

94. In practice, the administration of potassium chloride is extremely painful because, when administered intravenously.

95. Potassium chloride ravages the organs by causing an extremely painful burning sensation as it courses through the body.

96. Defendants have shown a deliberate indifference to the risk of inflicting unnecessary pain and suffering and towards serious medical needs, by copying lethal injection procedures from other states without investing meaningful and independent efforts to ensure that Kentucky's lethal injection execution procedures comply with contemporary medical standards and long-standing constitutional standards.

97. The risk of inflicting severe and unnecessary pain and suffering upon Plaintiffs during their execution is also grave because the Commonwealth has not carried out a lethal injection in over five years.

98. The risk of inflicting severe and unnecessary pain and suffering upon Plaintiffs during their execution is also grave because Warden Haeberlin, who is in charge of the prison where executions take place, has never been involved in an execution by lethal injection.

99. The risk of inflicting severe and unnecessary pain and suffering upon Plaintiffs during their execution is also grave because execution team members regularly have had difficulty inserting the IV needle during mock lethal injections.

100. This risk of unnecessary pain and suffering is also grave because when the Kentucky Department of Corrections carried out its first and only lethal injection, unanticipated problems occurred and the Department of Corrections proceeded without correcting these problems.

101. According to witnesses at the execution of Edward Harper on May 25, 1999,
it took ten minutes and at least three stabs with a needle to find a suitable vein to inject the chemicals.

102. According to witnesses at the execution of Edward Harper on May 25, 1999,
within two minutes of the administration of sodium thiopental, Harper's face turned purple and became puffy.

103. Defendants did not determine if a purple and puffy face was normal during an execution by lethal

injection, but decided to continue with the execution.

104. Defendants have taken no steps subsequently to determine whether a purple and puffy face is normal during a lethal injection.

105. This risk of unnecessary pain and suffering is also particularly grave in Kentucky because the procedures and protocols designed by Defendants:

a) do not include safeguards regarding the manner in which the execution is to be carried out;
b) do not rule out the possibility that a cut down procedure will be necessary to reach a vein;
c) do not establish the minimum qualifications and expertise required of the personnel performing the critical tasks in the lethal injection procedure;
d) do not establish appropriate criteria and standards that personnel must rely upon in exercising their discretion during the lethal injection procedures;
e) use "volunteers" to carry out the execution rather than highly trained individuals with proper credentials;
f) do not require the Deputy Commissioner to have any specialized training in administering the chemicals utilized in lethal injections;
g) do not require the Warden, Deputy Warden, Assistant Warden, Execution Commander,

Team Leader, and Execution Team to have any specialized training in administering the chemicals utilized in lethal injections;

h) permit the usage of additional needles if considered necessary by the execution team without providing any guidance to determine if additional needles are necessary;

i) allow modifications to any and all of the procedures at any time, and without providing advance notice to any death-sentenced inmate;

j) do not include or require the execution team to determine that the condemned inmate is unconscious prior to administering the second and third chemicals;

k) do not include or require the use of any medical equipment designed to monitor the condemned inmate's heart beat, pulse, or brain waives during the execution;

l) do not establish the methods for obtaining, storing, mixing, and appropriately labeling the drugs;

m) do not establish the minimum qualifications and expertise required for the person who will determine the concentration and dosage of each drug;

n) do not establish the manner in which the IV tubing, three-way valve, saline solution and other apparatus shall be modified or fixed in the event it is malfunctioning during the execution process, the minimum qualifications and expertise required of the person who shall have the discretion to decide to attempt such action, and the

criteria that shall be used in exercising such discretion;

o) do not establish the manner in which a heart monitoring system shall be installed and utilized to ensure that the inmate is deeply sedated while dying and the qualifications and expertise required for the person who operates this equipment;

p) do not establish the manner in which the IV catheters shall be inserted into the condemned inmate, and the minimum qualifications and expertise required for the person who is given the responsibility and discretion to decide when efforts at inserting the IV catheters should be abandoned in favor of some other constitutionally acceptable procedure;

q) utilize a needle that is too large to obtain intravenous access in a significant number of people;

r) permit individuals who have no medical training to be part of the execution team, and in some instances, to inject the lethal chemicals;

s) perform the entire lethal injection, including administering the chemicals, from a room adjacent to where the condemned inmate lies strapped to a gurney; and,

t) only permit doctors to pronounce death and sign the death certificate.

106. The risk of unnecessary pain and suffering during a lethal injection in Kentucky is also grave because Defendants have not and will not consider

the individual characteristics of each Plaintiff in determining the dosage of thiopental to administer to each Plaintiff during his execution.

107. Defendants' failure to take into consideration the individual circumstances of each Plaintiff in determining the quantity of thiopental to administer during their executions, and unwillingness to modify the amount as needed for each Plaintiff creates an unreasonable risk of unnecessary pain and suffering during their execution.

108. Plaintiff Ralph Baze is currently being treated with an acid reflux drug for a stomach condition.

109. Plaintiff Baze's medical condition substantially increases the likelihood that he will suffer a gastric reaction to the lethal injection chemicals.

110. Plaintiff Baze's medical condition substantially increases the likelihood that he will choke on vomit during his execution by lethal injection.

C. Facts relevant to a "cut down" procedure.

111. A "cut down" procedure is a surgical procedure used to obtain access to a vein when an intravenous port cannot be established.

112. A "cut down" procedure involves the use of a scalpel to make a series of incisions through the skin, the subcutaneous fat, and the underlying muscle, to reach the relatively deeply located central vein. The length of these incisions is in the range of two inches.

113. A "cut down" procedure can result in massive bleeding.

114. A "cut down" procedure can result in serious cardiac arrhythmias (abnormal beating of the heart causing shock).

115. A "cut down" procedure can cause pneumothoras (lung collapse due to collection of air between the lung and chest wall).

116. The amount of pain suffered during a "cut down" procedure depends on the experience of the person performing the procedure.

117. "Cut down" procedures performed during an execution in Kentucky are conducted by inadequately trained personnel.

118. No member of the execution team is a nurse or doctor.

119. The most difficult and painful portion of a lethal injection is the insertion of the IV needle.

120. Members of the execution team have repeatedly had difficulty inserting IV needles during mock lethal injections.

121. "Cut down" procedures utilized during an execution in Kentucky are conducted without anesthetizing the condemned inmate.

122. A "cut down" procedure can cause death.

123. A "cut down" procedure is not the preferred medical procedure for obtaining venous access.

124. In the medical profession, a "cut down" procedure is only utilized when a "percutaneous" procedure is not possible.

125. A "percutaneous" procedure is less invasive, less painful, easier to administer, and cheaper than a "cut down" procedure.

126. A "cut down" procedure is not mandated by K.R.S. section 431.220.

127. In Kentucky, doctors and nurses are not involved in obtaining venous access.

128. In Kentucky, doctors and nurses are not permitted to intervene if complications arise from attempting to obtain venous access.

129. Defendants refuse to rule out the use of a "cut down" procedure to obtain venous access

during an execution when accessing a vein becomes difficult.

130. The use of a "cut down" procedure despite alternative methods of obtaining venous access that pose less risk of causing death or extreme pain and suffering violates section 17 of the Kentucky Constitution and the Eighth Amendment to the United States Constitution.

131. Defendants are unable to rule out the possibility that a cut down procedure will be used to access the veins of each Plaintiff.

132. The likelihood that a "cut down" procedure will be used during the execution of each Plaintiff is substantially increased because Defendants had difficulty accessing a vein during the only lethal injection they have carried out.

133. In executing Edward Harper on May 25, 1999, it took Defendants ten minutes to access his veins, which began with sticking the needle in his left arm and concluded with the needle in his left hand.

134. The difficulty accessing Edward Harper's vein during his execution in 1999 was an unanticipated problem.

135. The likelihood that a "cut down" procedure will be used in Kentucky also increases dramatically because Defendants utilize a needle

that is too large to obtain venous access in most people.

136. Prolonged drug use damages veins, a condition called "bad veins."

137. "Bad veins" substantially increases the likelihood that a "cut down" procedure will be used to obtain venous access.

138. The likelihood that a "cut down" procedure will be used to obtain venous access substantially increases in a person with a prolonged history of intravenous drug use.

139. Defendants are aware that it is difficult to properly insert IV needles when a prisoner's veins have shrunk considerably because of longtime intravenous drug use.

D. Facts Relevant to the Due Process and Fundamental Fairness Claim.

140. The Due Process clause prevents a person from being sentenced to death and executed upon information that he is barred from refuting.

141. The Due Process clause requires notice and the opportunity to be heard prior to depriving a person of life, liberty, or property.

142. In Kentucky, inmates sentenced to death prior to March 31, 1998 are permitted to choose electrocution.

143. In order to make a knowing and intelligent choice between lethal injection and electrocution, death sentenced inmates must have an opportunity to review the entire execution procedures for both methods.

144. Defendants refuse to disclose the execution procedures that will be utilized in carrying out Plaintiffs' executions.

145. Due process and notions of fundamental fairness mandates that Defendants provide Plaintiffs with a copy of the execution procedures that will be used to extinguish their lives so that they can make an intelligent and knowing decision of a method of execution.

146. Due process and notions of fundamental fairness mandate that Defendants provide Plaintiffs with a copy of the execution procedures that will be used to extinguish their life so that they can independently determine whether a particular aspect of the lethal injection process may constitute cruel and unusual punishment, and to consult medical experts concerning that possibility.

147. Due process requires an evidentiary hearing on plaintiffs' claims prior to the scheduling of an execution date.

E. Facts Relevant to the Electrocution Claim.

148. Under K.R.S. section 431.220, condemned inmates sentenced prior to March 31, 1998, may choose between electrocution and lethal injection.

149. Plaintiffs will not select a method of execution.

150 The default method of execution in Kentucky is lethal injection.

151. Electrocution violates section 17 of the Kentucky Constitution and the Eighth Amendment of the United States Constitution.

152. Nebraska is the only state in the country that utilizes electrocution as the sole method of execution.

153. Warden Haeberlin, who is in charge of the prison where executions take place, has never been involved in an electrocution.

154. Execution by electrocution will cause Plaintiffs to consciously suffer an excruciatingly painful and protracted death.

155. The American Veterinary Medicine Association bans electrocution in the euthanasia of animals.

156. Electrocution causes death by asphyxia and cardiac arrest.

157. At least 2000 volts of electricity are necessary to cause heart death.

158. If heart death is not immediately achieved, execution by electrocution is excruciatingly painful.

159. During an execution by electrocution, the body fluids heat to a temperature near the boiling point of water.

160. Execution by electrocution causes third and fourth degree burns.

161. Third and fourth degree burns are extremely painful.

162. Consciousness is controlled by the brain.

163. The human skull insulates the brain from high voltage electricity.

164. If high voltage electricity does not reach the brain, Plaintiff will remain conscious during his execution.

165. There are documented cases of condemned inmates who were alive after the first administration of electricity.

166. Condemned inmates' hearts have beaten after the flow of electricity has stopped.

167. The continued beating of the heart after the cessation of the current indicates that unconsciousness was not instantaneous.

168. Respiratory movement has been observed in condemned inmates after the flow of electricity has stopped.

169. Respiratory movement indicates brain function and a lack of instant incapacitation.

170. Respiratory centers are located near deep pain centers.

171. Respiratory movement shows that the pain centers are not instantly destroyed.

172. If Plaintiffs are conscious during the electrocution, they will suffer an excruciatingly painful death by asphyxia and cardiac arrest.

173. Unnecessary pain and suffering is inherent in executions by electrocution.

174. Botched electrocutions have occurred in the United States.

175. Execution by electrocution causes mutilation of the body including:

a) severe burns to the face and scalp;
b) burns to the legs;
c) burns to other parts of the body;
d) discoloring of the skin;

e) layers of skin pealing and melting away;
f) contortion of the limbs, fingers, and toes;
g) vomiting blood;
h) vomiting drool; and,
i) occasionally exploding body parts.

176. The Commonwealth of Kentucky has carried out one execution by electrocution since 1962, the electrocution of Harold McQueen in 1997.

177. According to the post mortem examination of Harold McQueen conducted by the Western Regional Medical Examiner, McQueen suffered the following types of injuries from the electrocution:

a) a 1-2 mm ring like contact electrical burn encircling the parietal and frontal scalp, gray-brown in color, which was bordered by a 5mm –1 cm rim of pallor, which was bordered by a lateral rim of up to 3cm. of subcutaneous congestion;
b) a 17 x 6 cm. "irregular" contact electrical burn on the right calf just below the knee;
c) partially charred skin with blistering;
d) a 1-2 mm "C" shaped electrical burn on the right thigh;
e) pressure marks from the electric chair straps present on the face, back of head, extremities, and abdomen;
f) red-purple ecchymosis (escape of blood into the tissue) on the right bicep;
g) "irregular" red-purple ecchymosis on the upper left forearm; and,

h) a cluster of red-purple petechiae (hemmorrhage) on the dorsal right foot.

178. Execution by electrocution violates section 17 of the Kentucky Constitution and the cruel and unusual punishment clause of the Eighth Amendment because electrocution:

a) causes unnecessary pain and suffering;
b) creates a risk of unnecessary pain and suffering that is more than the Kentucky Constitution and the United States Constitution can tolerate;
c) mutilates the body;
d) serves no legitimate purpose considering the existence of readily available and less painful alternatives; and,
e) violates evolving standards of decency.

VI. CLAIMS FOR RELIEF

Claim A

179. Defendants are acting outside of, beyond, and in direct violation of their statutory authority by failing to provide a "continuous" administration of sodium thiopental.

Claim B

180. Defendants intend to extinguish Plaintiffs' lives by administering chemicals in a manner that will cause unnecessary pain, thereby depriving Plaintiffs of their right to be free from cruel

punishment under section 17 of the Kentucky Constitution.

Claim C

181. Defendants intend to extinguish Plaintiffs' lives by administering chemicals in a manner that will cause unnecessary pain, thereby depriving Plaintiffs of their right to be free from cruel and unusual punishment under the Eighth and Fourteenth Amendments of the United States Constitution.

Claim D

182. Defendants intend to extinguish Plaintiffs' lives by administering chemicals in a manner that creates a risk of unnecessary pain that is more than section 17 of the Kentucky Constitution tolerates.

Claim E

183. Defendants intend to extinguish Plaintiffs' lives by administering chemicals in a manner that creates a risk of unnecessary pain and suffering that is more than the cruel and unusual punishment clause of the Eighth Amendment tolerates.

Claim F

184. Defendants inadequate execution procedures create a risk of unnecessary pain and suffering that

is more than section 17 of the Kentucky Constitution tolerates.

Claim G

185. Defendants inadequate execution procedures creates a risk of unnecessary pain and suffering that is more than the cruel and unusual punishment clause of the Eighth Amendment tolerates.

Claim H

186. The use of pavulon (pancurium bromide) does not conform with evolving standards of decency, and, thereby, violates section 17 of the Kentucky Constitution.

Claim I

187. The use of pavulon (pancurium bromide) does not conform with evolving standards of decency, and, thereby, violates the cruel and unusual punishment clause of the Eighth Amendment to the United States Constitution.

Claim J

188. The use of a "cut down" procedure creates a risk of unnecessary pain and suffering that is more than section 17 of the Kentucky Constitution tolerates.

Claim K

189. The use of a "cut down" procedure creates a risk of unnecessary pain and suffering that is more than the cruel and unusual punishment clause of the Eighth Amendment tolerates.

Claim L

190. The chemicals Kentucky uses in lethal injection executions create an unacceptable risk of unnecessary pain and suffering in violation of section 17 of the Kentucky Constitution.

Claim M

191. The chemicals Kentucky uses in lethal injection executions create an unacceptable risk of unnecessary pain and suffering in violation of the cruel and unusual punishment clause of the Eighth Amendment tolerates.

Claim N

192. Defendants refusal to provide Plaintiffs with a complete copy of the execution procedures for extinguishing Plaintiffs' lives violates due process and fundamental fairness under the Kentucky Constitution.

Claim O

193. Defendants refusal to provide Plaintiffs with a complete copy of the execution procedures for extinguishing Plaintiffs' lives violates the Due

Process Clause of the United States Constitution and fundamental notions of fairness.

Claim P

194. Execution by electrocution constitutes cruel punishment under section 17 of the Kentucky Constitution.

Claim Q

195. Execution by electrocution constitutes cruel and unusual punishment under the Eighth Amendment to the United States Constitution.

Claim R

196. Execution by electrocution creates a risk of unnecessary pain and suffering that is beyond the amount tolerated by section 17 of the Kentucky Constitution.

Claim S

197. Execution by electrocution creates a risk of unnecessary pain and suffering that is beyond the amount tolerated by the Eighth Amendment to the United States Constitution.

VII. PRAYER FOR RELIEF

198. Plaintiffs request that this Court grant a temporary restraining order and preliminary injunction barring Defendants from scheduling

Plaintiffs' execution in the manner they currently utilize for carrying out lethal injections in Kentucky, and enter a declaratory judgment that the current manner for carrying out lethal injections violates both the Kentucky Constitution and the United States Constitution.

199. Plaintiffs request that this Court grant a temporary restraining order and preliminary injunction barring Defendants from scheduling Plaintiffs' execution by a lethal injection process that utilizes an inadequate anaesthetic (i.e sodium thiopental), and enter a declaratory judgment that the usage of sodium thiopental violates both the Kentucky Constitution and the United States Constitution.

200. Plaintiffs request that this Court grant a temporary restraining order and preliminary injunction barring Defendants from scheduling Plaintiffs' execution by a lethal injection process that utilizes Pavulon, and enter a declaratory judgment that the usage of pavulon violates both the Kentucky Constitution and the United States Constitution.

201. Plaintiffs request that this Court grant a temporary restraining order and preliminary injunction barring Defendants from scheduling Plaintiffs' execution by a lethal injection process that utilizes a "cut down" procedure to obtain venous access, and enter a declaratory judgment that the use of a "cut down" procedure violates both

the Kentucky Constitution and the United States Constitution.

202. Plaintiffs request that this Court grant a temporary restraining order and preliminary injunction barring Defendants from scheduling Plaintiffs' execution by a lethal injection process that does not provide a "continuous" administration of sodium thiopental, and enter a declaratory judgment that Defendants' execution procedures violate K.R.S. section 431.220.

203. Plaintiffs request that this Court grant a temporary restraining order and preliminary injunction barring Defendants from scheduling Plaintiffs' execution until Defendants provide Plaintiffs with a complete copy of the execution procedures Defendants intend to use in carrying out Plaintiffs' executions, and enter a declaratory judgment that the failure to disclose the execution procedures violates due process and fundamental notions of fairness.

204. Plaintiffs request that this Court enter a declaratory judgment that execution by electrocution violates section 17 of the Kentucky Constitution.

205. Plaintiffs request that this Court enter a declaratory judgment that execution by electrocution violates the cruel and unusual punishment clause of the Eighth Amendment to the United States Constitution.

206. Plaintiffs request such further relief that this Court finds necessary.

RESPECTFULLY SUBMITTED,

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August 9, 2004.

COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
CIVIL ACTION NO. 04-CI-01094

RALPH BAZE AND
THOMAS C. BOWLING — PLAINTIFFS

ANSWER

JOHN D. REES, COMMISSIONER
KENTUCKY DEPARTMENT OF CORRECTIONS;
GLENN HAEBERLIN, WARDEN KENTUCKY
STATE PENITENTIARY; AND
HON. ERNIE FLETCHER, GOVERNOR
OF KENTUCKY — DEFENDANTS

Defendants by counsel respectfully submit the following answer:

1. Plaintiffs have not stated a claim on which relief can be granted.

2. Plaintiffs' action is untimely, barred by laches, and procedurally defaulted.

3. Defendants admit Plaintiffs' paragraphs 1, 2, 3, 4, 20, 21, 22, 23, 26, 27, 30, 31, 34, 36, 37, 38, 43, 52, 59, 66, 83, 86, 108, 111, 118, 119, 126, 129, 131, 141, 142, 148, 150, 162, and 176.

4. Defendants deny Plaintiffs' paragraphs 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 24, 25, 28, 29, 32, 33, 35, 39, 40, 41, 42, 44, 45, 46, 47,

48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 84, 85, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 112, 113, 114, 115, 116, 117, 120, 121, 122, 123, 124, 125, 127, 128, 130, 132, 133, 134, 135, 136, 137, 138, 139, 140, 143, 144, 145, 146, 147, 149, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, and 204 because the allegations therein are argumentative and conclusory, or they relate only to electrocution claims which have been dismissed, or both.

WHEREFORE, the complaint and the amended complaint should be dismissed with prejudice.

OCTOBER 26, 2004

RESPECTFULLY SUBMITTED

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KENTUCKY

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COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
CIVIL ACTION NO. 04-CI-01094

RALPH BAZE AND
THOMAS C. BOWLING — PLAINTIFFS

DEFENDANTS ANSWERS TO REQUEST FOR PRODUCTION OF DOCUMENTS AND INTERROGATORIES

JONATHAN D. REES, COMMISSIONER
KENTUCKY DEPARTMENT OF CORRECTIONS;
GLENN HAEBERLIN, WARDEN KENTUCKY
STATE PENITENTIARY; AND
HON. ERNIE FLETCHER, GOVERNOR
OF KENTUCKY — DEFENDANTS

Come the Defendants, Jonathan D. Rees, Glenn Haeberlin and Hon. Ernie Fletcher, by counsel, and states as follows for their response to the Plaintiff s request for production of documents pursuant to the Kentucky Rules of Civil Procedure:

1. a complete copy of the execution procedures, policies, and guidelines utilized during lethal injections in Kentucky or related to any way to, any and all aspects of Defendants lethal injection procedure, including any changes or modifications and the reasons for such changes, and any writings or documents that are no longer in use:

Answer: All documentation responsive to this request has been provided or otherwise does not exist.

2. the number and size of needles inserted into the inmate as well as the number and size of catheters available for use during the execution procedure;

Answer: All documentation responsive to this request has been provided or otherwise does not exist.

3. size of the needles and catheter(s) utilized during the execution of Edward Lee Harper on May 25, 1999;

Answer: All documentation responsive to this request has been provided or otherwise does not exist.

4. any and all writing or documents concerning the monitoring of the inmate during the execution to determine 1) if the inmate is adequately sedated; and, 2) to determine if the inmate s heart is beating;

Answer: See attached Exhibit A. All other documentation responsive to this request has been turned over or otherwise does not exist.

5. the methods for obtaining, storing, mixing, and appropriately labeling the drugs, the minimum qualifications and expertise required for the person who will determine (have determined) the concentration and dosage of each drug to administer, and the

criteria that shall be used (has been used) in exercising this discretion;

Answer: See attached Exhibit B. All other documentation responsive to this request has been turned over or otherwise does not exist.

6. the manner in which the lethal injection equipment shall be modified or fixed in the event it is malfunctioning during the execution process, the minimum qualifications and expertise required of the person who shall have the discretion to decide to attempt such action, and the criteria that shall be used in exercising the discretion;

Answer: All documentation responsive to this request has been turned over or otherwise does not exist.

7. the manner in which the heart monitoring system shall be modified or fixed in the event it is malfunctioning during the execution process, the minimum qualifications and expertise required of the person who shall have the discretion to decide to attempt such action, and the criteria that shall be used in exercising this discretion;

Answer: All documentation responsive to this request has been turned over or otherwise does not exist.

8. the manner in which the IV catheters shall be inserted into the condemned prisoner, the minimum qualifications and expertise

required of the person who is given the responsibility and discretion to decide when efforts at inserting the IV catheters should be abandoned and the cut down procedure begun, and the criteria that shall be used in exercising this discretion;

Answer: All documentation responsive to this request has been turned over or otherwise does not exist. There is no cut down procedure.

9. the manner in which the condition of the condemned prisoner will be monitored to ensure that the administration of lethal injection chemicals reach the inmate s bloodstream;

Answer: All documentation responsive to this request has been turned over or otherwise does not exist.

10. the manner in which the condition of the condemned inmate will be monitored to ensure unconsciousness has been established prior to proceeding to the injection of pavulon, and similarly, prior to the injection of potassium chloride;

Answer: All documentation responsive to this request has been turned over or otherwise does not exist.

11. the manner in which the condition of the condemned prisoner will be monitored to confirm that proceeding to the next procedure would not inflict severe and unnecessary pain

and suffering on the condemned prisoner;

Answer: All documentation responsive to this request has been turned over or otherwise does not exist.

12. the minimum qualifications and expertise required of the person who is given the responsibility and discretion to order the staff to divert from the established protocols if necessary to avoid inflicting severe and unnecessary pain and suffering on the condemned prisoner, and the criteria that shall be used in exercising this discretion;

Answer: All documentation responsive to this request has been turned over or otherwise does not exist.

13. the minimum qualifications and expertise required of the person who is given the responsibility for training all members of the execution team;

Answer: All documentation responsive to this request has been turned over or otherwise does not exist.

14. the minimum qualifications and expertise required of the person who is given the responsibility and discretion to ensure that appropriate procedures are followed in response to unanticipated problems or events arising during the lethal injection procedure, and the criteria that shall be used in exercising this discretion;

Answer: All documentation responsive to this request has been turned over or otherwise does not exist.

15. all writing or documents related to the Defendants decision to adopt pavulon as a chemical to be administered during lethal injection and all documentation suggesting the use of pavulon may mask external, physical indications of pain being experienced during execution;

Answer: Defendants are unaware of any documentation responsive to this request.

16. all writings or documents reflecting when Defendants became aware that pavulon was banned as an acceptable drug for use by veterinarians in the euthanasia of household pets;

Answer: Defendants are unaware of any documentation responsive to this request.

17. the training (medical and non-medical), minimum qualifications, and experience required for the different personnel performing the tasks involved in lethal injections at the Capital Punishment Facility on the day of execution, and also during any preparation for an execution by lethal injection, including, but not limited to:

a) any executioners present;
b) any nurses present;

c) any physicians present;
d) any physician s assistants present
e) any emergency medical technicians present;
f) any paramedics present; and
g) any phlebotomists present.

Answer: All documentation responsive to this request has been provided or otherwise does not exist.

18. the manner in which the Kentucky Department of Corrections selects executioners for lethal injections;

Answer: Defendants are unaware of any documentation responsive to this request.

19. any medical licenses or medical training held by any individuals involved in carrying out a lethal injection in Kentucky in the past or in the future, the date the license(s) were issued, and by whom the license(s) were issued;

Answer: Based on the Court s ruling, listing the minimum qualifications of those individuals on the execution team would satisfy this response.

20 any licenses held by an EMT or paramedics involved in carrying out a lethal injection, the date the licenses were issued, and by whom the licenses were issued;

Answer: See response to Number 19.

21. any and all writing or documents relating to the physical location of the physician and the member(s) of the execution team responsible for injecting the chemicals whether by using a machine or by personally injecting the chemicals, during an execution;

Answer: All documentation responsive to this request has been provided or otherwise does not exist.

22. the name, last known address, and Department of Corrections affiliation and any non Department of Corrections affiliation of all official witnesses to the lethal injection of Edward Lee Harper on May 25, 1999;

Answer: See attached Exhibit C.

23. the name and last known address and media affiliation of all media witnesses to the execution of lethal injection of Edward Lee Harper on May 25, 1999;

Answer: See response to Number 22.

24. the date in which the current lethal injection machinery was designed;

Answer: Defendants are unaware of any documentation responsive to this request.

25. all writings or documents, or schematic wiring diagrams relied upon in designing the original lethal injection process in Kentucky;

Answer: Defendants are unaware of any documentation responsive to this request.

26. all writing or documents relied upon in making any changes, modifications, or repairs to the lethal injection procedure or equipment;

Answer: Defendants are unaware of any documentation responsive to this request.

27. names, and last known addresses of all medical professionals, vendors, subcontractors, and prisoners who were involved in designing and/or repairing the lethal injection equipment or machinery;

Answer: Defendants are unaware of any documentation responsive to this request.

28. any and all writings or documents reflecting consultations with Fred Leuchter concerning lethal injection equipment machinery, or lethal injection protocols utilized in Kentucky from the beginning of 1998 to the present, including the procedure utilized during the execution of Edward Lee Harper in 1999;

Answer: Defendants are unaware of any documentation responsive to this request.

29. any and all writing or documents pertaining to how the lethal injection equipment is tested to

ensure proper functioning;

Answer: All documentation responsive to this request has been provided or otherwise does not exist.

30. any and all writings or documents concerning execution protocols from other states that were reviewed in creating Kentucky s lethal injection protocol, and identification of which state s protocols were reviewed and a copy of these protocols;

Answer: Defendants are unaware of any documentation responsive to this request.

31. the names, last known addresses, and Department of Correction and non Department of Corrections affiliation of all individuals who physically inspected or observed lethal injection equipment in other states and copies of any writings or documents concerning these inspections or observations conducted in preparing or modifying Kentucky s protocol for lethal injection;

Answer: Defendants are unaware of any documentation responsive to this request.

32. any and all writings or documents concerning any unanticipated problems or malfunctions that occurred during any training or preparation of the execution team (dry runs) for lethal injection in

Kentucky along with the name, and last known address for all individuals who wrote such writings or documents, and all official witnesses who observed the problems or malfunctions;

Answer: Defendants are unaware of any documentation responsive to this request.

33. any and all writings or documents concerning the execution of Edward Lee Harper in 1999, including but not limited to, any unanticipated problems or malfunctions that occurred during the execution and all documentation pertaining to inserting the needle(s) along with the name, last known address and Department of Corrections or non-Department of Corrections affiliation of all individuals who wrote such writings or documents, and all official witnesses who observed the problems or malfunctions;

Answer: All documentation responsive to this request has been provided or otherwise does not exist.

34. copies of any and all writings or documents concerning post-execution photographs of the condemned inmate and post mortem examinations performed on individuals executed by lethal injection by the Commonwealth of Kentucky including autopsy narrative reports, notes, diagrams, photos, toxicology studies, and any other information pertaining to the autopsy, post-

mortem and pre-mortem examination for the following individuals along with the name(s), employment, and last known address of each person who conducted the examination, witnesses the examination, wrote and/or signed any and all reports:

1) Edward Lee Harper Executed on May 25, 1999

Answer: See attached Exhibit D. All other documentation response to this request has been provided or is not in the possession of the Department of Corrections.

35. any and all writings or documents related to the consciousness, heart rate and breathing of Edward Lee Harper upon administering each of the three drugs involved in his execution;

Answer: Defendants are in the possession of the print out to the heart monitor machine that is available for inspection at the Office of Legal Services, 2439 Lawrenceburg Road, Frankfort, Kentucky between the hours of 8:30 a.m. to 5 p.m., Monday through Friday.

36. any and all writings or documents relating to the discoloring of Edward Lee Harper s face during and following execution of May 25, 1999;

Answer: All documentation responsive to this request has been turned over or otherwise does not exist.

37. any and all writings or documents relating to the puffy nature of Edward Lee Harper s face during and following execution;

Answer: See response to Number 36.

38. any and all writings o documents relating to the ten minutes it took to insert a catheter into Edward Lee Harper s vein, the number of attempts to insert the need into Harper s vein;

Answer: See response to Number 36.

39. any and all writings or documents relating to the failed attempt to insert a catheter into Edward Lee Harper s vein;

Answer: See response to Number 36.

40. any and all writings or documents concerning all executions by lethal injection in Kentucky where the condemned inmate either was or appeared to be conscious after the administration of sodium thiopental (pentothal);

Answer: Defendants are unaware of documentation responsive to this request.

41. any and all writings or documents concerning all executions by lethal injection in Kentucky where the condemned inmate either was or appeared to be alive after the first cycle of lethal drugs were administered;

Answer: See response to Number 40.

42. all reports prepared by the Warden or on behalf of the Warden, or any other person, concerning the execution of Edward Lee Harper on May 25, 1999 including any and all pre-execution writings or documents concerning the execution checklists, or writings or documents compiled during the executions, and all post-execution writings or documents;

Answer: See attached Exhibit E. Defendants have redacted portions of the checklist in accordance with previous court rulings. Defendants object to sections titled Internal Security and External Security.

43. all writings or documents from any expert witnesses or potential expert witness retained or consulted by Defendants with respect to the issues raised by Plaintiff s Complaint, whether or not such writings or documents were generated before or after the Complaint was filed in this case;

Answer: Defendants have not designated an expert witness at this time.

44. all writings or documents pertaining to the reason for the change in method of execution from electrocution to lethal injection in the Commonwealth of Kentucky in 1998.

Answer: Defendants are unaware of any documentation responsive to this request.

INTERROGATORIES

1. List the names and addresses of persons known to the parties (or their counsel) to be witnesses concerning the facts of the case.

   Answer: Objection. This interrogatory is overly broad and vague. Plaintiff s counsel has been made aware and is resubmitting the question.

2. List the names and addresses of any expert witnesses whom the party proposed to use as a witness at any hearing or trail of the case.

   Answer: Defendants have not designated any witnesses.

3. Set forth a list of photographs, plats, sketches, or other prepared documents in possession of the party that relate to the claim or defense in the case.

   Answer: See attached Exhibit F. Defendants are unaware of any other documentation.

4. For each person known to the parties or counsel to be a witness concerning the facts of the case, set forth either a summary sufficient to inform the other party of the important facts known to have been observed by such witness, or provide a copy of any written or recorded statements taken from

such witnesses.

Answer: Objection. This interrogatory is overly broad and vague. Plaintiff s counsel has been made aware and is resubmitting the question.

5. Set forth the training, minimum qualifications, and experience required for the different personnel performing the tasks involved in the lethal injection process in Kentucky on the day of execution.

Answer: Qualifications for members of the execution team are contained in the Execution Protocol.

6. Set forth the size of the needles and catheter, utilized in executions by lethal injection in Kentucky;

Answer: The members of the IV Team are given the discretion to choose between an 18, 20, 22, or 24 gage needle after inspection of the condemned s veins.

7. Set forth the manner in which the Kentucky State Department of Corrections selects executioners for an execution by lethal injection.

Answer: The Warden of the Kentucky State Penitentiary and the Execution Team leader select the members of the execution team.

8. Detail whether Fred Leuchter was consulted

concerning the lethal injection equipment, machinery, or lethal injection protocols utilized in Kentucky from the beginning of 1998 to the present, and if so when and by whom.

Answer: Defendants have no knowledge of Fred Leuchter.

9. List the name(s), last known address, and Department of Corrections affiliation or non-Department of Corrections affiliation of all official witnesses and media witnesses to the execution by electrocution of Harold McQueen on July 1, 1997.

Answer: Defendants are unaware of any documentation responsive to this request.

10. List the name(s), last known address, and Department of Corrections affiliation or non-Department of Corrections affiliation of all official witnesses and media witnesses to the execution by lethal injection of Edward Lee Harper on May 25, 1999.

Answer: Please see response to Motion to Produce Documents.

11. Set forth the name, last known address, and Department of Corrections affiliation or non-Department of Corrections affiliation of the individual responsible for having drafted the original lethal injection protocol in Kentucky.

Answer: Judge overruled request.

12. Set forth any changes or modifications that have been made to the protocol for execution by lethal injection, the reasons for such changes, who was responsible for these modifications and when these changes were made.

Answer: Warden Haeberlin and Commissioner Rees authorized the increase of Sodium Thiopental to 3 grams on 12/14/04. Other modifications were authorized on that same date to include minimum qualification and training for execution team members. Moreover, procedures were written into the protocol to address if a stay is issued during an execution.

13. List the state execution protocols that were reviewed and all persons consulted when designing Kentucky's protocol for execution by lethal injection.

Answer: Phil Parker and Bill Henderson consulted with the State of Indiana.

14. List the names, last known address, and Department of Corrections affiliation and any non-Department of Corrections affiliation of all individuals who physically inspected or observed the lethal injection protocol in other states.

Answer: Defendants are unaware if any department employee physically

inspected or observed the lethal injection protocols of other states.

15. Detail the physical location of the physician and all members of the execution team responsible for injecting the lethal chemicals into the condemned inmate during the execution process.

Answer: The Department of Correction s physician stands outside the execution chamber. The member responsible for injecting the lethal chemicals stands behind a one way mirror behind the condemned.

16. Detail the minimum qualifications and expertise of any individuals responsible for monitoring the inmate s consciousness at each state of the execution process and any individuals responsible for ensuring that the flow of chemicals reaches the condemned inmate s bloodstream.

Answer: Please see Response to Motion to Produce Documents.

17. List the medical training of all individual(s) responsible for monitoring the condemned inmate s consciousness prior to the administration of pavulon and potassium chloride to ensure minimum pain and suffering during the execution process.

Answer: The Warden and a Deputy Warden monitor whether the condemned is conscious.

18. Detail what steps will be taken to identify any problems with the lethal injection equipment and how the equipment will be modified in the event that it malfunctions during the execution process.

Answer: The equipment utilized for an execution by lethal injection is checked multiple times leading up to an execution. The execution team also practices the procedure at a minimum of 10 times per year to be prepared for any contingency. The only equipment used is clear tubing, IV catheters, and needles which are readily accessible in case one isn t working properly.

19. Set forth the reason each chemical is administered during the execution process.

Answer: Twenty-seven other states and the U.S. Bureau of Prisons uses the same combination of drugs.

20 Detail the names, last known address, and Department of Corrections affiliation or non-Department of Corrections affiliation of all individuals responsible for conducting the autopsy on Edward Lee Harper.

Answer: See attached Exhibit D.

21 Detail the manner in which the lethal injection is tested, all such tests conducted from 1998 to the present, the training, and Department of Corrections affiliation or non-

Department of Corrections affiliation of all individuals involved in testing the lethal injection equipment.

Answer: Please see the Execution Team Qualifications section of the revised 12/14/04 protocol. Each test includes the siting of an IV into a volunteer.

22 List the names and last known addresses of all official witnesses who witnesses the insertion of the IV needs and/or attempts to insert a needle into Edward Lee Harper s vein(s) during and immediately prior to his execution on May 25, 1999.

Answer: No official witnesses viewed the insertion of the IV needles into Edward Lee Harper s veins.

23 List all pre and post-execution documents, pertaining to the execution of Edward Lee Harper, including the name, last known address and any Department of Corrections affiliation or non-Department of Corrections affiliation of both the author and the recipient of any such document.

Answer: Please see Responses to Motion for Production of Documents.

OCTOBER 22, 2004 RESPECTFULLY SUBMITTED

/S/ JEFF MIDDENDORF

JEFF MIDDENDORF

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COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
CIVIL ACTION NO. 04-CI-01094

RALPH BAZE AND
THOMAS C. BOWLING — PLAINTIFFS

DEFENDANTS ANSWERS TO SECOND REQUEST FOR PRODUCTION OF DOCUMENTS

JONATHAN D. REES, COMMISSIONER
KENTUCKY DEPARTMENT OF CORRECTIONS;
GLENN HAEBERLIN, WARDEN KENTUCKY
STATE PENITENTIARY; AND
HON. ERNIE FLETCHER, GOVERNOR
OF KENTUCKY — DEFENDANTS

Come the Defendants, Jonathan D. Rees, Glenn Haeberlin and Hon. Ernie Fletcher, by counsel, and states as follows for their response to the Plaintiff's second request for production of documents pursuant to the Kentucky Rules of Civil Procedure:

1. all writing or documents pertaining to the 19983 National Institute for Corrections conference in Colorado, including but not limited to any information about carrying out executions;

Answer: Objection. Relevance.

2. all writing or documents pertaining to former Warden Phil Parker's training for executions by lethal

injection, including but not limited to,

a) all documents pertaining to the Indiana execution by lethal injection that Parker witnessed;

Answer: Objection. Relevance.

b) all documents pertaining to any external training conferences Parker attended;

Answer: Objection. Relevance.

c) all documents pertaining to any internal training conferences Parker attended;

Answer: Objection. Relevance.

d) all documents pertaining to any medical personnel (whether in Kentucky or not) Parker consulted concerning executions by lethal injections;

Answer: Objection. Relevance.

e) all documents pertaining to any department of corrections personnel in other states that Parker consulted concerning executions by lethal injection;

Answer: Objection. Relevance.

f) any documents pertaining to any execution protocols concerning executions by lethal injection that Parker reviewed; and.

Answer: Objection. Relevance.

g) any documents pertaining to any visits to other correctional facilities made by Parker in reference to lethal injection.
Answer: Objection. Relevance.

3 all documents pertaining to the purchase of the lethal injection chemicals for the execution in Kentucky that was scheduled to take place on November 23, 2004, including but not limited to, the purchase order for the chemicals.
Answer: Objection. Relevance.

JANUARY 27, 2005

RESPECTFULLY SUBMITTED

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COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
CIVIL ACTION NO. 04-CI-01094

RALPH BAZE AND
THOMAS C. BOWLING PLAINTIFFS

DEFENDANTS ANSWERS TO SECOND SET OF INTERROGATORIES

JONATHAN D. REES, COMMISSIONER
KENTUCKY DEPARTMENT OF CORRECTIONS;
GLENN HAEBERLIN, WARDEN KENTUCKY
STATE PENITENTIARY; AND
HON. ERNIE FLETCHER, GOVERNOR OF
KENTUCKY DEFENDANTS

Come the Defendants, Jonathan D. Rees, Glenn Haeberlin and Hon. Ernie Fletcher, by counsel, and states as follows for their response to the Plaintiff's second set of interrogatories pursuant to the Kentucky Rules of Civil Procedure:

1. List the names and addresses of persons known to the parties (or their counsel) to be witnesses concerning the below listed subsections and set forth a summary of the facts known by each person:

    a) the adoption of Kentucky's first lethal injection protocol and all subsequent protocols:

Answer: Plaintiffs have conducted sixteen depositions and the answers provided in those sixteen depositions is the extent of information the Defendants can provide.

b) the reason why sodium thiopental, pavulon, and potassium chloride are used in Kentucky lethal injections and the reasons for the concentrations set out in the protocol;

Answer: See Defendants response to number 19 of the Plaintiffs First Set of Interrogatories. Any names of people who made the final decision to adopt the three chemicals used in an execution have been disclosed during the previous sixteen depositions.

c) the execution of Edward Harper in 1999;

Answer: See Defendants' response to numbers 22 and 23 of Plaintiffs Request for Production of Documents.

d) the mixing of the chemical for lethal injection;

Answer: Tom Campbell, former

Deputy Commissioner. Any other member who may have witnesses the mixing of chemical were members of the execution team.

e) inserting an I.V. line; and,

Answer: Former Warden Phil Parker. Former Deputy Warden Bill Henderson. All other people known to having view the insertion of I.V. lines were members of the execution team.

f) physical examination of a condemned inmate in preparation for an execution. Dr. Hiland examined Edward Harper. Dr. Rafi was prepared to conduct a physical examination of Thomas Bowling but Mr. Bowling refused.

2. Set forth the number of each size needle and catheter on hand for use during an execution.

Answer: See Defendant's response to number 6 of Plaintiff's First Set of Interrogatories.

3. Set forth all supplies that are available for use during an execution, specifying the number of each supply, what each supply is used for, and whether each supply is necessary or optional

for an execution by lethal injection.

Answer: This has been answered in the previous sixteen depositions.

4. Set forth the reason why Defendants Rees and Haeberlin increased the level of thiopental from 2 grams to 3 grams.

Answer: Objection. Relevance.

5. Set forth the reason why Defendants Rees and Haeberlin determined that the proper increase in level of thiopental was to 3 grams;

Answer: Objection pursuant to Civil Rule 33.01(3)

6. List the year that Phil Parker and Bill Henderson consulted with the State of Indiana in reference to adopting Kentucky's lethal injection procedure.

Answer: Objection pursuant to Civil Rule 33.01(3).

7. List the names and Department of Corrections affiliation of all individuals in Indiana that Phil Parker and Bill Henderson spoke with in reference to adopting Kentucky's lethal injection procedure.

Answer: Objection pursuant to Civil Rule

33.01(3).

8. Set forth the date on which Phil Parker witnesses a lethal injection in Indiana.

Answer: Objection pursuant to Civil Rule 33.01(3).

9. Detail the equipment that will be available for use in reviving a condemned inmate if a stay of execution occurs after the first chemical has been injected.

Answer: Objection pursuant to Civil Rule 33.01(3).

10. Set forth the training that the individual responsible for reviving an inmate has for each piece of equipment in #9.

Answer: Objection pursuant to Civil Rule 33.01(3).

11. Detail the names, last known address, and Department of Corrections affiliation or non-Department of Corrections affiliation of all individuals responsible for reviewing the autopsy of Edward Lee Harper.

Answer: Objection pursuant to Civil Rule 33.01(3).

12. Set forth the location where the 1998 and 1999 revisions of the Kentucky execution

protocol (attached as exhibit E to the response to the request for production of documents) were found.

Answer: Objection pursuant to Civil Rule 33.01(3).

13. Set forth how Defendants became aware of the existence of the documents referred to #11 the name and DOC affiliation or non-DOC affiliation of the person(s) who notified Defendants of the existence of the documents referred to in #11.

Answer: Objection pursuant to Civil Rule 33.01(3).

14. State when the chemicals were purchased for the November 23, 2004 scheduled execution of Thomas Clyde Bowling.

Answer: Objection pursuant to Civil Rule 33.01(3).

15. State the number of vials of each chemical that were obtained in preparation for the Bowling execution:

Answer: Objection pursuant to Civil Rule 33.01(3).

16. State from where/whom the chemicals for the Bowling execution were purchased:

Answer: Objection pursuant to Civil Rule 33.01(3).

17. List the sponsor, name of conference, location, year held, name of Kentucky DOCC employees in attendance, and presenters/faculty members for all training conferences from 1990 to the present that either focused entirely or in part on conducting executions, including but not limited to the conference held in Colorado in 1993 sponsored by the National Institute for Corrections;

Answer: Objection pursuant to Civil Rule 33.01(3).

18. Specify whether the "executioner" is under a contract specifically to carry out executions in Kentucky, or is an employee of the Kentucky Department of Corrections who also has responsibilities that are unrelated to lethal injections. If the Kentucky Department of Corrections employs a "contract executioner," specify whether the "executioner" has carried out executions in other states, naming which states.

Answer: Objection pursuant to Civil Rule 33.01(3).

JANUARY 27, 2005

RESPECTFULLY SUBMITTED

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IN THE CIRCUIT COURT
FOR FRANKLIN COUNTY
COMMONWEALTH OF KENTUCKY

RALPH BAZE,	
and,	
THOMAS C. BOWLING,	
Plaintiffs,	CIV. ACTION 04-CI-01094
v.	
JOHN D. REES, Commissioner, Kentucky Department of Corrections, Frankfort, Kentucky	
GLENN HAEBERLIN, Warden, Kentucky State Penitentiary, Eddyville Kentucky,	
and,	
UNKNOWN EXECUTIONERS,	
Defendants.	

September 8, 2004 - Pre-Trial Proceedings

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By David Smith

20 [redacted] Um, and, and, and
21 furthermore, as far as I know and I've never seen the protocol,
22 uh, I, I, I think it would safe to assume that, that the, the –
23 that a, a protocol would, would envision, uh, some physical
24 examination of the Defendant in anticipation of, uh, an
25 execution. [redacted]

* * * *

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* * * *

25 JUDGE ROGER CRITTENDEN: Or is that a part of the protocol?
26 I mean, is that – is there a written protocol that says everyone

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1 that's involved shall be trained this way and this way and this
2 way and shall have so many hours of training or –
3 DAVID A. SMITH: Well, I've, I've – with,

without, without
actually knowing the, the, the exact answer to your question,
Your Honor, I, I, I, I, I think that's, that's sort of assumed,
and I think it's safe to assume that, that the, the protocol
would, would – the procedural itself would contemplate some kind
of training and practice and so forth. Now how, how, uh, how
involved that is or how frequent that is, um, uh, uh, again,
we're knocking on the door of, you know, identifying, uh, who's
going to be where doing what. [redacted]

* * * *

September 30, 2004
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* * * *

DAVID A. SMITH: Uh, as, as far as the protocol is
concerned, it's my understanding, not having seen the thing but
having -

* * * *

November 23, 2004
Page 142

* * * *

JUDGE ROGER CRITTENDEN: Is it – is that in the protocol,
Mr. Smith, as to, as to where the needle is inserted if it can't

be found – if, if a vein can't be found in the arm or a hand, is, is it, is any of that in the protocol, and is all that that I was just reading in the testimony? I remember reading the protocol, and I, I'm – uh, right now, I can't just – can't remember if it is or it isn't.

DAVID A. SMITH: I'm – uh, to, to answer your question, Your Honor, I don't know that that, that is, that's defined in the, in the protocol. Um, you, you may recall from the, uh, report concerning Eddie Lee Harper in 1999 that, um, though, though they were successful in finding a vein in one arm, uh, as far as the backup procedure for the other arm, I believe they

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had to insert it in his hand. And that's another thing. I, I'm glad you brought that up about the protocol, um, be- – because the, the – it is not a statute. It is not a regulation. It is a fluid thing. It is a guideline for the Department of Corrections to follow in trying to carry out the, the mandate of the courts

and the mandate of the Governor in an orderly fashion. And the, uh, the excitement that's been expressed over the fact that there have been all these multiple and myriad changes in the protocol over the years, uh, my response to that would be so what? Different people come and go. Phone numbers change. If – it, it's the prerogative of the Department of Corrections that if they decide they want to, they want to tweak the protocol a little bit, I, I, I, I think that's within the realm of, of their authority. And I'm not talking about changing it in midstream, but I'm talking about, uh, revisions as, as time goes on. These are, these are guidelines. You know, I, I, I often hear, uh, um, revi- – would-be revisionists of the Constitution are fond of saying, well, well, the Constitution is a living, breathing document. Well, I think that could be fairly said about, uh, Kentucky's protocol. [redacted]

* * * *

* * * *

By Brian T. Judy

17 [redacted] I mean, the inquiry is whether
18 the three drugs that we use in the protocol that we use, does it
19 amount to cruel and unusual punishment. That's the question we
20 have to decide. We don't need a history lesson, uh, on, you
21 know, what other states' protocols calls for, you know, how this
22 evolved across the country in other states. [redacted]

* * * *

IN THE CIRCUIT COURT
FOR FRANKLIN COUNTY
COMMONWEALTH OF KENTUCKY

RALPH BAZE, and, THOMAS C. BOWLING, Plaintiffs, v. JOHN D. REES, Commissioner, Kentucky Department of Corrections, Frankfort, Kentucky; GLENN HAEBERLIN, Warden, Kentucky State Penitentiary, Eddyville Kentucky, and, UNKNOWN EXECUTIONERS, Defendants.	CIV. ACTION 04-CI-01094

April 18, 2005

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JUDGE ROGER CRITTENDEN: Would you raise your hand, please?
Do you swear or affirm the entire testimony you're about to give
in this matter will be the truth?
PROFESSOR DEBORAH DENNO: I do.
JUDGE ROGER CRITTENDEN: All right, please sit.
DAVID M. BARRON: Would you please state your full name,
spelling your last name for the record?
PROFESSOR DEBORAH DENNO: My name is Deborah West Denno. My
last name is spelled D-E-N-N-O.
DAVID M. BARRON: What is your current profession?
PROFESSOR DEBORAH DENNO: I'm a Professor of Law at Fordham
University School of Law in New York City.

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DAVID M. BARRON: How long have you been a Professor at
Fordham?
PROFESSOR DEBORAH DENNO: I've been a Professor at Fordham
for 14 years. The first six of those years. I was a Associate
Professor of Law, and the last eight years I've

been a full
Professor of Law.
DAVID M. BARRON: Where have you previously testified
concerning lethal injection?
PROFESSOR DEBORAH DENNO: I've testified in Connecticut in
1997, and I also testified in Texas in 1997.
DAVID M. BARRON: As a law professor, have you researched
lethal injection?
PROFESSOR DEBORAH DENNO: Yes, I have.
DAVID M. BARRON: When did you begin conducting this
research?
PROFESSOR DEBORAH DENNO: I began conducting the research in
1991.
DAVID M. BARRON: How many texts or articles have you
published on lethal injection?
PROFESSOR DEBORAH DENNO: I've – I have five publications on
lethal injection.
DAVID M. BARRON: What are they called?
PROFESSOR DEBORAH DENNO: The first publication is called,
uh, *Electrocution, Gas Chamber, and Lethal Injection*; that will
be published in the *Encyclopedia Britannica* later this year.
That will be a 2005 publication. The second publication is

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called *Lethally Humane? The Evolution of Execution Methods in the United States.* That was published in 1998 in the – excuse me, in 19- – in 2003 in the second edition of, um, *America's Experiment on Capital Punishment.* That was an edited book. The third publication is called *Execution and the Forgotten Eighth Amendment.* That was published in the first edition of the book, uh, uh, *The Death Penalty: America's*, uh, *America's*, uh, *Experiment.* Uh, and that was published in 1998. The fourth publication is entitled, uh, uh, *Getting to Death: Are Executions Constitutional?* That was published in *Iowa Law Review* in 1997. And the last publication is, uh, is called, uh, uh, *When Legislatures Delegate Death: The Troubling Paradox Behind.* uh, *Executions of*, uh, *Electrocution and Lethal Injection and What That Says About Us.* That's a 2002 publication in the *Ohio State Law Journal.*

DAVID M. BARRON: Let's go through each of these articles

in a little more detail. What was the first one you mentioned about?

PROFESSOR DEBORAH DENNO: The first publication I mentioned is called *Electrocution, Gas Chamber, and Lethal Injection.* That's forthcoming in the *Encyclopedia Britannica.* I was invited to write three separate entries on each of those topics by the editors of the *Encyclopedia Britannica.* And the Encyclopedia will be published both in hardcopy and, uh, and over the internet, as, as I said, at the end of this year.

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The second publication is, is called, um, uh, *Lethally Humane? The Evolution of Execution Methods in the United States.* It was published in 2003 in an edited volume called, um, *America's Experiment with Capital Punishment.* And that, uh, that article or that – it's a book chapter – is, uh, is an update of my 2002 survey in the *Ohio State Law Journal.* And that survey did several things. First, in the first part of the article, I look at the, uh, Constitutionality of lethal

injection according
to Eighth Amendment standards, the three primary standards being,
uh –
MALE VOICE: Objection, Your Honor. This was – they agreed
not to introduce the standard in our motion in limine last
Friday.
JUDGE ROGER CRITTENDEN: All right.
DAVID M. BARRON: Your Honor, may I briefly respond? We're
not going into details of any standard at the moment. I'm just
trying to lay some foundation for her knowledge and expertise in
lethal injections.
JUDGE ROGER CRITTENDEN: Okay, just don't go into standards.
PROFESSOR DEBORAH DENNO: Okay. The, the second part, uh,
uh, of that article was my, or the book chapter, was my 2001
survey of all 36 states at the time, in 2001, who were – that
were using lethal injection. I, and I looked at all the
protocols of those, of those states. Um, and I focused on
particular aspects of those protocols in writing up the book
chapter, uh, which in- – included the kinds of chemicals that

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were used in lethal injection and the amount of chemicals; the training, preparation, qualifications of the individuals who, who engage in lethal injection; uh, whether the presence of media personnel, uh, at, at a lethal injection execution; the involvement of doctors, uh, and as well as technical aspects of the lethal injection procedure, and how much of that procedure that witnesses could actually see. The third article, or the – it was also a book chapter, was published in 1998. Uh, it, it's called *Execution and the Forgotten Eighth Amendment*, in the first edition of, uh, *America's Experiment with Capital Punishment*. That was an overview of lethal injection at, at that time in terms of botched executions, the technical aspects of lethal injection, uh, medical aspects as well as, uh, just as an aside the Eighth Amendment standards. The, the, uh, fourth article was entitled *Getting to Death: Are Executions Constitutional?* As I

mentioned, that was
18 published in 1997 in, uh, *Iowa Law Review.* In that article,
19 I also look, without going into detail on Eighth Amendment
20 standards in the context of lethal injection as well as, again,
21 the constant – the, uh, technical aspects. I have the whole
22 appendix showing, uh, evolution of execution methods over time,
23 uh, a course the – across the century as well, for every state,
24 as well as an explanation in every state about why the state
25 first selected a particular method of execution, and why it kept
26 on changing to other mechs-, uh, methods of execution.

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1 Uh, the last article is my 2002 article in *Ohio State Law*
2 *Journal.* It's called, um, uh, that I, that I mentioned, *When*
3 *Legislatures Delegate Death: The Troubling Paradox Between –*
4 *Behind State Uses of Electrocution and Lethal Injection and*
5 *What That Says About Us.* That is again a, a, the, the first
6 publication of my 2001 survey on lethal injection protocols. As

I mentioned, that survey looked at the kinds of chemicals that were – that were used; the, uh, amount of chemicals that were used; the training, preparation and qualifications of execution personnel; the kinds of witnesses that are allowed into a lethal injection execution; and the involvement of medical personnel; uh, and how much of the lethal injection that witnesses, uh, can see; as well as, as I mentioned, the technical aspects of lethal injection executions.

DAVID M. BARRON: In your 2002 article, *When Legislatures Delegate Death*, how did you go about researching the information you just discussed?

PROFESSOR DEBORAH DENNO: Well, we, we, we used several strategies for researching this, um, this kind of, uh, information. In 19 states, we found that the, that the protocols were actually publicly available, either on a website or, uh, they were discussed in a particular case, or they, they were, uh, available in hardcopy so that we can get – we could get them in hardcopy and actually look at the information. In about 10 states, the protocols, um, weren't

publicly
26 available, in which case we ended up phoning, uh, uh, members

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1 of the Department of Corrections in each state where this
2 information wasn't, uh, available, and asking them questions
3 about their execution protocol. And that information was given
4 to us either over the phone or in an, in an email, or in a
5 letter, some other kind of communication.
6 And then there were seven states where we were simply not
7 able to get any kind of information.
8 DAVID M. BARRON: How many states currently have the death
9 penalty?
10 PROFESSOR DEBORAH DENNO: Thirty-seven states currently, uh,
11 have the death penalty. And that's, of course, excluding New
12 York which just abolished the death penalty.
13 DAVID M. BARRON: Out of that, how many states use lethal
14 injection as a method of execution?
15 PROFESSOR DEBORAH DENNO: Thirty-six states currently use
16 lethal injection as a method of execution. Again, that, that
17 excludes New York.

DAVID M. BARRON: Which state was the first one to adopt lethal injection?

PROFESSOR DEBORAH DENNO: Oklahoma was the first state to adopt lethal injection.

DAVID M. BARRON: In what year?

PROFESSOR DEBORAH DENNO: That was in 1977.

DAVID M. BARRON: How did it come about that Oklahoma adopted lethal injection?

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PROFESSOR DEBORAH DENNO: Well, in 1977, then-Senator Bill Dawson, who's now deceased, uh, was trying to come up with a method of execution to use in Oklahoma, because he was finding that electrocution and lethal inject- – excuse me – electrocution and lethal gas were too expensive to use. So he heard that lethal injection might be a cost-efficient way of executing inmates, and he contacted Stan – Dr. Stanley Deutsch, who at that time was head of, uh, the Oklahoma Medical Center's Department of Anesthesiology; he was the chair. And he asked Dr. Deutsch to make some recommendations about lethal

injection. And in a
letter of February 28th, 1977, from Dr. Stanley Deutsch to Bill
Dawson, um, Deutsch, uh, wrote out his recommendations.
DAVID M. BARRON: What chemicals were adopted in Oklahoma's
first lethal injection protocol?
PROFESSOR DEBORAH DENNO: Oklahoma's first lethal injection
protocol adopted sodium thiopental and a, a paralytic agent.
There are two, two chemicals that it adopted.
DAVID M. BARRON: Based on your research, what if any
medical or scientific research was conducted to determine the
effects of thiopental when used for an execution?
PROFESSOR DEBORAH DENNO: Based on my research, I didn't
come across any kind of studies on the, uh, effect of thiopental
during the, the cour-, uh, an execution.
DAVID M. BARRON: What about the effect of the paralytic
agent?

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PROFESSOR DEBORAH DENNO: Uh, in my research, I came across
no studies that were looking at the effect of the paralytic agent

in the context of an execution.
DAVID M. BARRON: What about the effect of those two
chemicals in combination?
PROFESSOR DEBORAH DENNO: In my research, I found no studies
on the effect of that combination of thiopental and, uh,
pancuronium bromide.
DAVID M. BARRON: What about whether those chemicals cause
pain during an execution?
PROFESSOR DEBORAH DENNO: In my research, I found no studies
on whether or not those chemicals cause pain in combination.
DAVID M. BARRON: And what about whether other alternative
chemicals were available that could be used?
PROFESSOR DEBORAH DENNO: In my research, I found no studies
or investigation on whether or not any other kinds of chemicals
could be used in the course of a lethal injection execution.
DAVID M. BARRON: After Oklahoma adopted lethal injection,
how many additional states adopted lethal injection?
PROFESSOR DEBORAH DENNO: There were 36 additional states
that adopted, uh, lethal injection after Oklahoma.
DAVID M. BARRON: Out of those states, how

many of them did
23 you review execution protocols or other materials?
24 PROFESSOR DEBORAH DENNO: I reviewed, uh, execution
25 protocols for 28 states.

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1 DAVID M. BARRON: Why did you not review for the rest of the
2 states?
3 PROFESSOR DEBORAH DENNO: I didn't review for the rest of
4 the states for two primary reasons. At the time of my 2001
5 study, Alabama wasn't yet using lethal injection. And also
6 there were seven states which did not give us information, for
7 a variety of reasons. Four states didn't give us information
8 because they said that information was confidential, and those
9 states were, um, were Pennsylvania, South Carolina, Virginia,
10 and, and, Nevada. Three additional states said they didn't have
11 the information, and those states were Kansas, Kentucky, and, New
12 Hampshire.
13 DAVID M. BARRON: Out of those states, how many of them use
14 the two chemicals originally adopted in, in

Oklahoma?
PROFESSOR DEBORAH DENNO: Out of those 28 states, 27 states use the two chemicals that were adopted in Oklahoma.
DAVID M. BARRON: Which states are those?
PROFESSOR DEBORAH DENNO: Those states are Arizona, um, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, uh, Idaho, Illinois, Indiana, uh, Louisiana, Maryland, Mississippi, Missouri, Montana, uh, New York, New Mexico, uh, North Carolina, um, Ohio, Oregon, uh, South Dakota, Tennessee – yeah, South Dakota, Tennessee, Texas, the State of Washington – excuse me, Utah, the State of Washington, and Wyoming. I might have left out a state.

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DAVID M. BARRON: Out of that 20-plus number of states, how many of them conducted any medical or scientific research into the effects of the chemicals they were using?
PROFESSOR DEBORAH DENNO: In all my research, I didn't come across any studies that showed that they had conducted any kind of research or, uh, investigation into the effect

of these
chemicals.
DAVID M. BARRON: How many out of that list of states
conducted any medical research about whether these chemicals
cause pain?
PROFESSOR DEBORAH DENNO: None.
DAVID M. BARRON: The effect that would occur if used in
combination?
PROFESSOR DEBORAH DENNO: I found no research or studies
investigating the effect of the combination of those drugs.
DAVID M. BARRON: And what about whether alternative
chemicals would be available?
MALE VOICE: Your Honor, I believe that whole line of
questions has already been asked and answered.
JUDGE ROGER CRITTENDEN: It has. It's been asked and
answered, so go ahead.
DAVID M. BARRON: Are there any states that do not use those
two chemicals?
PROFESSOR DEBORAH DENNO: Uh, there, uh, the, the chemicals
of, uh, sodium thiopental and pancuronium bromide?
DAVID M. BARRON: Yes.

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PROFESSOR DEBORAH DENNO: Yeah, New Jersey uses sodium thiopental and potassium chloride.
DAVID M. BARRON: How did potassium chloride come to be used?
PROFESSOR DEBORAH DENNO: Well, there are three, uh, three plausible explanations for how potassium chloride became to be used in these – in these lethal injection executions. The first explanation seems to be that, uh –
MALE VOICE: Your Honor, I object. This is speculation. She's talking about three possible explanations, and it seems to be, uh, I, I don't think that's an appropriate question or appropriate answer. It's speculation.
DAVID M. BARRON: Your Honor?
JUDGE ROGER CRITTENDEN: We're only talking about New Jersey, so let's go ahead. What, what's – the question is how did potassium chloride come to be used?
DAVID M. BARRON: Based on the research that was conducted looking into that.
PROFESSOR DEBORAH DENNO: Based on my research, the – that

was conducted looking into this, uh –
MALE VOICE: Uh, ma'am –
JUDGE ROGER CRITTENDEN: I'm, I'm going to let her – I'm
going to let her answer (inaudible), uh, then we'll into what was
the research.
PROFESSOR DEBORAH DENNO: Okay, number one, Oklahoma
mentioned in its, uh, 1977 protocol, it mentioned potassium

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chloride as a possible paralytic agent to be used in a lethal
injection execution. And Oklahoma becomes relevant because it
was the foundation for other states' methods of executions,
including New Jersey. The second reason or explanation given for
the use of, uh, potassium chloride is there's, uh, been
considerable amount written that doctors were involved in the
development of lethal injection executions, and that they were
particularly involved in the, um, uh, execution method for New
Jersey.
The third explanation, or, is that according to Fred – Fred
Leuchter, who was the predominate maker

and creator of execution
12 methods in this country up 'til 1990, that he was the one who
13 suggested that the third chemical, potassium chloride, be used in
14 lethal injection executions.
15 DAVID M. BARRON: How did you go about learning this
16 information and researching it?
17 PROFESSOR DEBORAH DENNO: I, uh, in terms of going about it
18 and studying the protocols, uh, we looked at every protocol that
19 was used in a, in a lethal injection, uh, execution and, and
20 called up states as I, as I mentioned.
21 DAVID M. BARRON: Now we, we've talked previously about
22 thiopental and the paralytic agent. Now we've added in potassium
23 chloride. Can you just clarify which states now actually use
24 those three chemicals, rather than the – just the two we
25 previously talked about.

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1 PROFESSOR DEBORAH DENNO: Yes. So the 27 states that I
2 previously mentioned, though, use those, uh, those, uh, three
3 chemicals in addition to, to New Jersey.
4 DAVID M. BARRON: Now once the potassium

chloride has been
added, was there any medical or scientific research on the
effects of potassium chloride used during an execution?
PROFESSOR DEBORAH DENNO: No. I've come across no studies
or research on the effect of potassium chloride in the lethal
injection context.
DAVID M. BARRON: You mentioned earlier that you reviewed
documents from North Carolina's protocol.
PROFESSOR DEBORAH DENNO: That's right.
DAVID M. BARRON: At the time of your article, what
concentration of thiopental did they use?
PROFESSOR DEBORAH DENNO: Five grams.
DAVID M. BARRON: In preparing for your testimony today, did
you review Kentucky's execution protocol, including their 2004
revisions?
PROFESSOR DEBORAH DENNO: Yes, I did.
DAVID M. BARRON: What chemicals do they use in lethal
injections?
PROFESSOR DEBORAH DENNO: Kentucky uses sodium thiopental,
pancuronium bromide, and potassium chloride.
DAVID M. BARRON: Are those first two

chemicals the same
25 types of chemicals that were used in the original Oklahoma
26 protocol?

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1 PROFESSOR DEBORAH DENNO: Yes, they are.
2 DAVID M. BARRON: And to your knowledge, has any medical or
3 scientific studies been conducted on the effects of these three
4 chemicals that Kentucky currently uses in lethal injection
5 executions?
6 PROFESSOR DEBORAH DENNO: In all my research, I've not come
7 across any kind of medical or scientific studies looking at those
8 three chemicals and their effects in the context of an execution.
9 DAVID M. BARRON: I've no further questions at this time.
10 JUDGE ROGER CRITTENDEN: Thank you. Who's for the
11 Commonwealth?
12 BRIAN T. JUDY: Good morning, Professor Denno.
13 PROFESSOR DEBORAH DENNO: Good morning.
14 BRIAN T. JUDY: Uh, let's start off, can you go step by step
15 in a little bit more detail on the research

you've conducted in
16 your 2002 Ohio State article?
17 PROFESSOR DEBORAH DENNO: Certainly. As I said, in about
18 19 states, the protocols that we were looking at were publicly
19 available. So, for example, they – the information would be
20 available on a website. It would have been already published, or
21 was available in hardcopy so that we could look at it. If it was
22 not so publicly available, uh, we ended up calling individuals at
23 the Department of Corrections, or where we were referred to, to
24 get additional information. And I was working with a research
25 assistant, and either my research assistant or I would contact
26 those individuals and ask them more specifics about their

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1 protocols. For example, what chemicals they used; the amount of
2 those chemicals; what kinds of, uh, witnesses they had; whether
3 there was involvement of, uh, some kind of doctor at the time;
4 uh, how much of the – how much could be seen of the execution,
5 etc.

BRIAN T. JUDY: Um, you looked at case law?
PROFESSOR DEBORAH DENNO: Yes, we did look at case law.
BRIAN T. JUDY: You looked at various law review articles.
PROFESSOR DEBORAH DENNO: Yes, we did. And we also looked at newspaper articles as well.
BRIAN T. JUDY: Did you talk to, to any doctors on the issue?
PROFESSOR DEBORAH DENNO: Did, did I talk to – yes, I did.
BRIAN T. JUDY: Which doctors?
PROFESSOR DEBORAH DENNO: I talked to, uh, Edward Bruner and, uh, and, uh, I can't remember the name, and excuse me, of the second doctor I (inaudible).
BRIAN T. JUDY: Dr. Mark Heath?
PROFESSOR DEBORAH DENNO: Um, I spoke to Dr. Mark Heath very briefly when I was conducting the 2002 article, uh, just very briefly, and only about the Timothy McVeigh case and whether Timothy McVeigh showed tears when he was being executed, but not for anything else.
BRIAN T. JUDY: You said that there were three states when you wrote this article that stated they did not have an execution protocol.

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PROFESSOR DEBORAH DENNO: Well, there were actually, uh, four states said the information was confidential, and three states informed us that they did not have an execution protocol.

BRIAN T. JUDY: And one of those states was Kentucky.

PROFESSOR DEBORAH DENNO: That's right.

BRIAN T. JUDY: Um, when was this article written?

PROFESSOR DEBORAH DENNO: It was, well, it was, uh, my survey was conducted – I ended the conducting of my survey in the fall of 2001, and I say that in my 2002 article. The article was actually released in January of 2002 because that's – law review articles take several months to release after it's been written.

BRIAN T. JUDY: And according – how did you come to the conclusion that Kentucky did not have a lethal injection protocol in 2001?

PROFESSOR DEBORAH DENNO: Well, we, we found that it didn't have a publicly available protocol in the way that I explained.

that it wasn't on the website, it wasn't in hardcopy, and it wasn't something that we could get a case – in a case or a newspaper article or a law review article. So we contacted, um, Department of Corrections and also the General Counsel of – in Kentucky. And my research assistant asked Brenda Priestly on March 14th, 2001 about, uh, Kentucky's protocol. And she responded that Kentucky didn't have a protocol, but it, uh, it was, uh, going to conduct, uh, executions on a case-by-case basis, in terms of information, and that, uh, she couldn't provide us any information because there – there wasn't any.

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BRIAN T. JUDY: Um, where in your article did – do you mention that Kentucky was going to do it on a case-by-case basis?

PROFESSOR DEBORAH DENNO: I, I, I don't mention that in the article; that was in our notes. But I do have in Table 20 of my 2002 Ohio State article, I do specify that we talked to Brenda. We didn't know her last name, uh, then, and

the, and the date
that we talked to her. In our notes, we have all sorts of
details. For example, we have the, the time that we spoke to
her and, and another individual in the Library at the General
Counsel's office as well. And they referred us to Kentucky's,
uh, Kentucky's statute. And, of course, I already had the
statute for information on how Kentucky, uh, conducted its
protocols.
BRIAN T. JUDY: And who was the other person that you talked
to at the Library here (inaudible).
PROFESSOR DEBORAH DENNO: Uh, my assistant talked to another
person in the, the Library. Uh, I, I don't have the name with
me. It's in, in our notes. I can provide you with that
information.
BRIAN T. JUDY: And you're talk- – on Table 20, it's found
on page 183 of your paper, correct?
PROFESSOR DEBORAH DENNO: I, I imagine so. I don't have my
page numbering memorized.
BRIAN T. JUDY: And you stated on Table 20 that you talked
to Brenda Priestly with the General Counsel's office on March

26 14th, 2001.

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1 PROFESSOR DEBORAH DENNO: That's right.
2 BRIAN T. JUDY: What was Ms. Priestly's position at that
3 time?
4 PROFESSOR DEBORAH DENNO: I don't know. She didn't provide
5 it.
6 BRIAN T. JUDY: Was it asked?
7 PROFESSOR DEBORAH DENNO: Yes, it was asked. My assistant
8 always asks people's positions. Some people did not want to
9 provide their positions to us over the phone.
10 BRIAN T. JUDY: And was the question asked, "Does Kentucky
11 have a policy or procedure?"
12 PROFESSOR DEBORAH DENNO: Yes, it was.
13 BRIAN T. JUDY: And in Kentucky, do you know there's a law
14 for developing a policy and procedure for an – for a state
15 agency?
16 PROFESSOR DEBORAH DENNO: I don't know every detail of
17 Kentucky law.
18 BRIAN T. JUDY: And so based upon this information, you came
19 to the conclusion that Kentucky did not have

an execution
protocol?
PROFESSOR DEBORAH DENNO: We were told over the phone by Brenda Priestly in the Kentucky's General Counsel office that Kentucky did not have a protocol. And there was nothing written for us apart from Kentucky's statute.
BRIAN T. JUDY: Well, I just thought you just previously testified that Kentucky's protocol wasn't publicly available.

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PROFESSOR DEBORAH DENNO: It – the statute was publicly available.
BRIAN T. JUDY: Uh, the protocol.
PROFESSOR DEBORAH DENNO: It was not publicly available, that's right.
BRIAN T. JUDY: Well, did we have a policy or did we not have a policy? Because if we didn't have a policy, there's nothing be publicly available, correct?
PROFESSOR DEBORAH DENNO: Well, that's right. We were told that you did not have any kind of protocol. That's right, that there was no protocol, and that it was done on a case-by-case

basis in Kentucky.
BRIAN T. JUDY: When you wrote this article, were there any
cases that had examined other states' protocols?
PROFESSOR DEBORAH DENNO: Uh, there were several cases that
had examined, uh, some states' protocols, that's right.
BRIAN T. JUDY: Now throughout your paper, you consistently
state that Kentucky does not have a protocol, according to Brenda
Priestly.
PROFESSOR DEBORAH DENNO: I, I, I stated in Table 20 that
Kentucky did not have a protocol, and that was also information
in Table 11 of my article.
BRIAN T. JUDY: Okay. Do you recall Table 19?
PROFESSOR DEBORAH DENNO: Yes.
BRIAN T. JUDY: Um, it's broken down into three parts.

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THEODORE S. SHOUSE: Judge, I'd ask that the witness be
shown this. This sounds like it could get complicated.
JUDGE ROGER CRITTENDEN: Please, if, if you're going to talk
to it, unless she's familiar with it, I –

BRIAN T. JUDY: I just asked if she was familiar with it –

JUDGE ROGER CRITTENDEN: If she's familiar with it (inaudible/mixed voices)

BRIAN T. JUDY: – and she said "yes," Your Honor.

JUDGE ROGER CRITTENDEN: Okay. All right. We'll see what the questions are.

PROFESSOR DEBORAH DENNO: I don't know every detail, but.

BRIAN T. JUDY: Part 3 says "States with a Private Protocol."

PROFESSOR DEBORAH DENNO: I'm, I'm familiar with that part.

BRIAN T. JUDY: What states are listed?

PROFESSOR DEBORAH DENNO: There, there are five states listed there.

BRIAN T. JUDY: Which, which were?

PROFESSOR DEBORAH DENNO: Uh, there was, uh, there was, um, uh, there was Kentucky, there was, uh, let's see, there's Nevada, uh, Nevada, Kentucky, uh, uh, South Carolina, Virginia, and, uh, let's see, um, there was a fifth state as well.

BRIAN T. JUDY: But according to this, Kentucky did have a private protocol.

PROFESSOR DEBORAH DENNO: And Pennsylvania, Pennsylvania.

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BRIAN T. JUDY: According to this, Kentucky did have a private protocol.

PROFESSOR DEBORAH DENNO: It had the – what we were told over the phone, which was the statute.

BRIAN T. JUDY: But is a statute and protocol the same thing?

PROFESSOR DEBORAH DENNO: We were told that's what Kentucky's protocol was. I don't think it is, but that's what we were told over the phone, and that's what Brenda was – Priestly referred us to.

BRIAN T. JUDY: Okay. Can you then define what – the term "regularity."

PROFESSOR DEBORAH DENNO: I'm – you want me to define the term "regularity"?

BRIAN T. JUDY: Yes, please.

PROFESSOR DEBORAH DENNO: Something that happens at, at some times but not every time.

BRIAN T. JUDY: Sometimes and not every time. Regularity, something that might happen once a week?

JUDGE ROGER CRITTENDEN: Can – can we move on with this,

please?
BRIAN T. JUDY: Yes.
PROFESSOR DEBORAH DENNO: It depends on the context.
JUDGE ROGER CRITTENDEN: Whether there was a protocol or not
a protocol, whether she found out there was one or not one, there
is one, so let's – let's move.

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BRIAN T. JUDY: Yes. In your article, you, you stated that
Kentucky engages in execution with some regularity, right?
PROFESSOR DEBORAH DENNO: That, that's right, relative to
other – to other states.
BRIAN T. JUDY: And when you wrote this article, how many
executions had Kentuc- – Kentucky conducted?
PROFESSOR DEBORAH DENNO: I, I cannot quite remember at the
moment. That's a very detailed article, and I can't remember
every detail.
BRIAN T. JUDY: Would you dis- – dispute two? If I told you
that Kentucky has only conducted two executions since 1977?
PROFESSOR DEBORAH DENNO: I. I can't remember.
BRIAN T. JUDY: Okay. You testified that in

your research
there were no studies on the effects of sodium thiopental,
pancuronium bromide, and potassium chloride as it relates to
lethal injection.
PROFESSOR DEBORAH DENNO: That's right.
BRIAN T. JUDY: Did you look at studies from medical
resources, from medical treatises?
PROFESSOR DEBORAH DENNO: Absolutely.
BRIAN T. JUDY: While there's – might be no articles dealing
specifically with lethal injection, there are scientific studies
on these three drugs.
PROFESSOR DEBORAH DENNO: Oh, that's right. I, I had
specified repeatedly on direct that it, it was in the context of
lethal injection.

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BRIAN T. JUDY: And there are studies of when these drugs
may be lethal.
PROFESSOR DEBORAH DENNO: I don't dispute that.
BRIAN T. JUDY: Now in your article, you listed 31 botched
executions, correct?

PROFESSOR DEBORAH DENNO: That's what I recall.

BRIAN T. JUDY: And it was executions from '77 through 2001?

PROFESSOR DEBORAH DENNO: Um, from, from what I recall of that article.

BRIAN T. JUDY: It was a pretty detailed list, wasn't it? You drew your resources from various places?

PROFESSOR DEBORAH DENNO: That's right.

BRIAN T. JUDY: May I approach the witness, Your Honor?

JUDGE ROGER CRITTENDEN: (Inaudible)

BRIAN T. JUDY: Where did you obtain the information from this – for these 31 alleged botched, botched executions?

PROFESSOR DEBORAH DENNO: Well, on page 141, I, um, specify in an asterisk footnote where I obtained that information, and I say that part of the information is obtained from my article, *Getting to Death*, which was published in 1997, and part of it was obtained by – from Michael Radelet's, uh, uh, article on facing – chapter in *Facing the Death Penalty*: it's a book. And also a website and some newspaper articles.

BRIAN T. JUDY: Eddie Lee Harper was executed in Kentucky in

25 1999. His, his execution is not listed on "botched executions,"
26 is it?

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1 PROFESSOR DEBORAH DENNO: No, it's not.
2 BRIAN T. JUDY: Of the 31 allegedly botched executions, can
3 you count how many you listed as being botched because they had
4 problems inserting the needles?
5 PROFESSOR DEBORAH DENNO: Uh, uh, you want me to count now?
6 BRIAN T. JUDY: Please.
7 PROFESSOR DEBORAH DENNO: (Pause) I, I counted about 21. I
8 might have missed a few.
9 BRIAN T. JUDY: So, there's 31 alleged botched executions on
10 Table 9, correct?
11 PROFESSOR DEBORAH DENNO: That's right.
12 BRIAN T. JUDY: Um, according – would you dispute that
13 there's been 745 lethal injection executions in the United States
14 between 1997 and November of 2001?
15 PROFESSOR DEBORAH DENNO: I, I wouldn't dispute that.
16 BRIAN T. JUDY: So (inaudible) 745 is true. Um, that means
17 of the 31 allegedly botched executions accounts

for four percent
over that time, for various – I mean, for various botched –
allegedly botched lethal injections, correct?
PROFESSOR DEBORAH DENNO: Given that I don't have a
calculator here with you, I'll take for granted your, your
calculation and agree –
BRIAN T. JUDY: I, I did it this morning.
PROFESSOR DEBORAH DENNO: – okay, and agree with you.
BRIAN T. JUDY: Okay. And then you said there's 21 that
relates to having problems finding – inject – inserting a needle.

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PROFESSOR DEBORAH DENNO: That was one of a number of
problems. That wasn't the only, only problem in those, in those
botched executions. It just –
BRIAN T. JUDY: And that – and those accounts for the other
10.
PROFESSOR DEBORAH DENNO: Uh, no, I'm saying with the 21,
where the problem was finding a needle, in a, in a number of
those cases, and I could reread this, there were additional
problems to just finding the needle, or, excuse

me, finding the
vein. There were other difficulties going on, on, such as in a
cutdown procedure, uh, I –
BRIAN T. JUDY: You read our – you read our protocol.
PROFESSOR DEBORAH DENNO: Okay.
BRIAN T. JUDY: Kentucky does not have a cutdown procedure,
does it?
PROFESSOR DEBORAH DENNO: No, I'm, I'm just saying – you
were asking about these 31 lethal injection executions, the
botches that, that are from all over the country. So I'm just
giving some context.
BRIAN T. JUDY: So basically about one and a half percent
of all executions that you allegedly claimed were botched was
because of something other than needle insertion?
PROFESSOR DEBORAH DENNO: No, I, I don't agree with that.
BRIAN T. JUDY: Now then, um, you've continued your research
since you wrote this 2002 article, haven't you?
PROFESSOR DEBORAH DENNO: Yes.

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BRIAN T. JUDY: When you wrote this article, the Connecticut

Supreme Court had reviewed the – their execution protocol in the *State v. Webb*, correct?

PROFESSOR DEBORAH DENNO: Uh, that's, that's right.

BRIAN T. JUDY: But it's not listed in, in your, in your article, is it?

PROFESSOR DEBORAH DENNO: Uh, that, we, that was – I'm sorry. What? Could you be a little bit more precise?

BRIAN T. JUDY: The Connecticut Supreme Court, um, issued a published opinion on February 15th, 2002, in *State v. Webb*, 750 A.2d 448, in which it went through Connecticut's execution protocol.

PROFESSOR DEBORAH DENNO: That's right. And it's not in my article because my article came out in January of 2002.

BRIAN T. JUDY: Well, this was decided February 15th, 2000.

PROFESSOR DEBORAH DENNO: The, the *Webb* case?

BRIAN T. JUDY: Yes. If your article didn't come out until 2002, it came out two years after the *Webb* opinion.

PROFESSOR DEBORAH DENNO: Yeah, I'm, I'm sorry. Uh, why should I have mentioned that?

BRIAN T. JUDY: Well, I mean, you, you attack all these –
the states' protocols because of various problems. But *State v. Webb* is a Supreme Court of a state that addressed Connecticut's
protocol, but it's not mentioned.
JUDGE ROGER CRITTENDEN: When, when was that? I, I thought
you said 2002 also.

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BRIAN T. JUDY: I'm sorry, February 15th, 2000.
JUDGE ROGER CRITTENDEN: February 15th, 2000. All right.
Go ahead.
PROFESSOR DEBORAH DENNO: So you're asking me why I didn't
mention that –
BRIAN T. JUDY: Yes.
PROFESSOR DEBORAH DENNO: – case in, in, in my article?
BRIAN T. JUDY: Yes.
PROFESSOR DEBORAH DENNO: Because I wasn't looking at every
conceivable case on every state in an already 240-page article.
Also, I – that article, as I mention repeatedly in my 2002
article, uh, is, you know, relies on prior, uh, publications of
mine.

BRIAN T. JUDY: Let me move on to another cases. I mean, it's, it's (inaudible) *Simms v. State*, a Supreme Court case of Florida, that deals with the topic of their protocol.

PROFESSOR DEBORAH DENNO: Well, that's right. But I make no\ claim in my 2002 article that I look at every case that's addressed every state on every method of execution. My primary goal was to look at the protocols in those states.

BRIAN T. JUDY: But, I mean –

PROFESSOR DEBORAH DENNO: And I mention and discuss Connecticut's protocol in great detail.

BRIAN T. JUDY: But *State v. Webb* is the Supreme Court of Connecticut upholding its protocol.

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PROFESSOR DEBORAH DENNO: That, that's right. But I make no claim in my 2002 article to have discussed every state's case law that addresses its execution methods. Otherwise, my article would have been 500 pages long.

BRIAN T. JUDY: In 2002, how many states' Supreme Courts had addressed their protocols, their lethal injection

protocols?
PROFESSOR DEBORAH DENNO: I, I don't know.
BRIAN T. JUDY: Okay. And basically according to your 2002
paper, Lee – Eddie Lee Harper was not a botched execution,
correct?
PROFESSOR DEBORAH DENNO: According to my article, that's
right.
BRIAN T. JUDY: Thank you.
JEFF MIDDENDORF: Your Honor, is it all right if I ask a
couple of questions?
JUDGE ROGER CRITTENDEN: Well, I thought we were going to do
this one lawyer on a side.
(Inaudible/mixed voices)
JUDGE ROGER CRITTENDEN: Why don't you get with Mr. Judy and
see if there's anything else (inaudible)?
THEODORE S. SHOUSE: (Inaudible) minute to talk among
themselves.
(Background conversation)
JUDGE ROGER CRITTENDEN: Yes, sir. Go ahead.
BRIAN T. JUDY: I just have four questions. Um, what are
you a professor for (inaudible)?

PROFESSOR DEBORAH DENNO: I'm a Professor of Law at Fordham University School of Law.

BRIAN T. JUDY: What topics?

PROFESSOR DEBORAH DENNO: Criminal Law, Torts, Criminal And Scientific Evidence.

BRIAN T. JUDY: Throughout your testimony, you state "we." Who is "we"?

PROFESSOR DEBORAH DENNO: I'm, I'm sorry. When I'm referring to what, uh, the study?

BRIAN T. JUDY: Yes.

PROFESSOR DEBORAH DENNO: I worked with a research assistant on that study.

BRIAN T. JUDY: So just the two of you.

PROFESSOR DEBORAH DENNO: Yes, that's right.

BRIAN T. JUDY: Uh, you're opposed to the death penalty, aren't you?

PROFESSOR DEBORAH DENNO: I'm opposed to the death penalty as it currently exists. In theory, I'm not opposed.

BRIAN T. JUDY: But in an article I read, it stated that you were (inaudible) death penalty. Would you dispute that?

PROFESSOR DEBORAH DENNO: I'm not sure what article you're, you're talking about.

BRIAN T. JUDY: Okay. Um, you said Kentucky did not have a protocol in 2001. Um, can you explain how Kentucky executed Eddie Lee Harper in 1999 without a protocol?

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PROFESSOR DEBORAH DENNO: We were told by Brenda Priestly on March 14, 2001, in our notes, that the executions would be conducted on a case-by-case basis.

BRIAN T. JUDY: But you don't know who – what Brenda Priestley's position was at –

PROFESSOR DEBORAH DENNO: She didn't tell us what her position was.

BRIAN T. JUDY: Thank you.

JUDGE ROGER CRITTENDEN: Mr. Barron.

DAVID M. BARRON: Very briefly, how do you learn of botched executions?

PROFESSOR DEBORAH DENNO: How do we learn about botched executions? We look at newspaper accounts that journalists write, write on the executions.

DAVID M. BARRON: Could there be botched executions that you are not aware of?

PROFESSOR DEBORAH DENNO: Absolutely. Uh, you know, in the

history of this country journalists have typically been excluded from witnessing executions. It's a relatively recent development that they've been allowed to witness them and not all executions are witnessed and written about.

DAVID M. BARRON: Thank you.

BRIAN T. JUDY: No further questions.

JUDGE ROGER CRITTENDEN: Thank you, Professor. Step down.

PROFESSOR DEBORAH DENNO: Thank you very much.

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JUDGE ROGER CRITTENDEN: Mr. Campbell, do you want to come up here please and be sworn? If you can make it through. Would you raise your hand please? Do you swear or affirm the entire testimony you're about to give in this matter will be the truth?

TOM CAMPBELL: Yes, sir.

JUDGE ROGER CRITTENDEN: Be seated.

THEODORE S. SHOUSE: Good morning, sir.

TOM CAMPBELL: Good morning.

THEODORE S. SHOUSE: Could you just state your name for the record?

TOM CAMPBELL: Tom Campbell.

THEODORE S. SHOUSE: How are – how are you employed,

Mr. Campbell?
TOM CAMPBELL: I'm presently Director of the Louisville
Metro Corrections Department.
THEODORE S. SHOUSE: Okay. How were you employed before
that?
TOM CAMPBELL: I was retired.
THEODORE S. SHOUSE: Okay, from?
TOM CAMPBELL: Uh, Department of Corrections.

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THEODORE S. SHOUSE: Okay. How were you employed between
1996 and 1999?
TOM CAMPBELL: Uh, Deputy Commissioner for the Department of
Corrections.
THEODORE S. SHOUSE: Deputy Commissioner in charge of?
TOM CAMPBELL: Adult Institutions.
THEODORE S. SHOUSE: Okay. Would you describe what your
duties were in that position, briefly?
TOM CAMPBELL: Uh, primarily responsible for the oversight
of, of the, uh, different correctional facilities throughout the
state. Um, supervised the two Regional Directors that supervised
the Wardens of the facilities.
THEODORE S. SHOUSE: Okay. Does that

include the Kentucky
14 State Penitentiary at Eddyville.
15 TOM CAMPBELL: Yes, sir.
16 THEODORE S. SHOUSE: Okay. Do you recall when Kentucky
17 adopted lethal injection as a method of executing condemned
18 inmates?
19 TOM CAMPBELL: Um, either '98 or '99.
20 THEODORE S. SHOUSE: Okay. Okay, but you have a
21 recollection of when that occurred, maybe not specific by date,
22 but you remember when.
23 TOM CAMPBELL: Yes.
24 THEODORE S. SHOUSE: Okay. And you were the Deputy
25 Commissioner for Adult Institutions at that time.
26 TOM CAMPBELL: That's correct.

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1 THEODORE S. SHOUSE: Okay. What was your role in, uh,
2 implementing that, that regimen? What did – what role did you
3 play in ensuring that the Department would be able to carry out
4 that legislative mandate?
5 TOM CAMPBELL: Well, the Penitentiary, uh, staff was
6 primarily responsible for putting together the procedure, um, but

my job, as well as the Commissioner's, was just oversight of that and providing any support that we could for the staff –

THEODORE S. SHOUSE: Okay.

TOM CAMPBELL: – in developing that procedure.

THEODORE S. SHOUSE: Did you participate in any meetings or discussions about drafting the protocol?

TOM CAMPBELL: I'm sure that I, I did, but I don't specifically recall.

THEODORE S. SHOUSE: Okay. Who would have been primarily responsible for drafting that initial protocol?

TOM CAMPBELL: Uh, it would have been the, uh, to the best of my memory, the Warden and Deputy Wardens at the facility, General Counsel, uh, you know, as far as actually putting together the procedure. You know, we had a procedure as far as execution is, is concerned, so it was fine-tuning the procedure as far as the different means of execution.

THEODORE S. SHOUSE: Was Philip Parker the Warden at the Penitentiary at the time?

TOM CAMPBELL: Yes, sir.

THEODORE S. SHOUSE: Okay. Uh, are you aware if any scientific tests were consulted to determine the best way to implement lethal injection?

TOM CAMPBELL: No, sir.

THEODORE S. SHOUSE: Okay. Are you aware if any doctors were consulted?

TOM CAMPBELL: Not to my recollection, no, sir.

THEODORE S. SHOUSE: Okay. Are you aware if any scientific literature was consulted?

TOM CAMPBELL: Not specifically, no.

THEODORE S. SHOUSE: Okay. Do you know how many drugs are used in a lethal injection in the Commonwealth?

TOM CAMPBELL: I believe that there's three.

THEODORE S. SHOUSE: Okay. Do you know what those are?

TOM CAMPBELL: Sodium pentothal I believe is one. Um, potassium chloride, I believe something like that is the second. I don't remember the third.

THEODORE S. SHOUSE: Okay. Do you know why these three drugs were selected?

TOM CAMPBELL: I know that each one of them has a specific function. What each one of those specifically

does I don't remember,
22 there was – but each one of them had a, a function
23 that when they're administered, that they would do.
24 THEODORE S. SHOUSE: Okay, I guess what I'm asking is, do
25 you know why these three drugs and not three other drugs?
26 TOM CAMPBELL: Oh, no, I do not.

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1 THEODORE S. SHOUSE: Okay. Do you know why these three
2 drugs and not two other drugs?
3 TOM CAMPBELL: I don't remember what – why we would – made
4 that decision.
5 THEODORE S. SHOUSE: Okay, or one?
6 TOM CAMPBELL: No, sir.
7 THEODORE S. SHOUSE: Okay. Do you know, um, do you know how
8 much, what the amount of each drug injected is?
9 TOM CAMPBELL: No, I do not.
10 THEODORE S. SHOUSE: Okay. Do you know how the – there are
11 amounts. Okay? There are set amounts. Do you know how those
12 amounts were arrived at?
13 TOM CAMPBELL: No. No, sir.
14 THEODORE S. SHOUSE: Okay. Do you, um, have you ever

discussed with a medical doctor anything about what these drugs do or how they might interact?

TOM CAMPBELL: I don't recall any discussion with a medical doctor. I mean, somewhere, you know, during that process we would have discussed what the drugs do and so forth, but I don't remember specifically.

THEODORE S. SHOUSE: Okay. Do you know if any other drugs were ever considered?

TOM CAMPBELL: No, I don't.

THEODORE S. SHOUSE: Okay. Now do you remember witnessing the execution of Mr. Eddie Lee Harper?

TOM CAMPBELL: Yes, sir.

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THEODORE S. SHOUSE: Okay. Um, did you, do you rem- – do you recall witnessing the mixing of the drugs that were injected into Mr. Harper?

TOM CAMPBELL: No, sir.

THEODORE S. SHOUSE: Okay. Now, uh, what's an EOR within the Department of Corrections?

TOM CAMPBELL: It's an Extraordinary Occurrence Report.

THEODORE S. SHOUSE: And the name is kind of self-

explanatory, but what is an ER – what function does an EOR serve within DOC?

TOM CAMPBELL: It would be a report prepared, um, by the facility if there was an extraordinary occurrence that occurred, such as, uh, an assault or an escape or something of that nature.

THEODORE S. SHOUSE: Would you, in your experience, uh, with the Department of Corrections, expect an EOR to be prepared regarding the execution of Mr. Harper?

TOM CAMPBELL: Probably, yes, sir.

THEODORE S. SHOUSE: Okay. Who would have prepared – who would have been responsible for preparing an EOR on Mr. Harper's execution?

TOM CAMPBELL: Uh, the Warden.

THEODORE S. SHOUSE: Okay. And where would that be stored, if you know?

TOM CAMPBELL: Uh, they used to be submitted to, um, to my office as Deputy Commissioner, and then they would be filed.

THEODORE S. SHOUSE: Okay.

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TOM CAMPBELL: So.

THEODORE S. SHOUSE: Do you have any

recollection of seeing
an EOR on Mr. Harper's execution?
TOM CAMPBELL: No, sir.
THEODORE S. SHOUSE: Okay. One final question: Do you
think that executing the inmate in a humane manner is a goal of
an execution?
TOM CAMPBELL: I think the responsibility of the staff at
the Penitentiary that has to carry out this task is to do it in
the most professional manner possible.
THEODORE S. SHOUSE: Okay.
TOM CAMPBELL: And I think that that's what they do.
THEODORE S. SHOUSE: Is being humane encompassed under the
title of "professional"?
TOM CAMPBELL: I, I would think so. Yes, sir.
THEODORE S. SHOUSE: Thank you. I have nothing further,
Judge.
JUDGE ROGER CRITTENDEN: Thank you. Mr. Middendorf?
JEFF MIDDENDORF: Yes, sir. Just a few questions, Mr.
Campbell. Um, were you in charge at all in, in ordering the
drugs?
TOM CAMPBELL: No, sir.
JEFF MIDDENDORF: Were you in charge of administrating –

24 administering the drugs during that time, during an execution?
25 TOM CAMPBELL: No, sir.

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1 JEFF MIDDENDORF: Good. And, uh, were you ever stationed
2 at the Kentucky State Penitentiary? Was that one of the places
3 that you were ever employed? I know you were employed by the
4 Department of Corrections, however, were you ever down at KSP?
5 TOM CAMPBELL: No, sir.
6 JEFF MIDDENDORF: Okay. When was the last time you looked
7 at the protocol, Kentucky's execution protocol, where you would
8 be able to reference what type of drugs and the amounts of drugs
9 are administered in an execution?
10 TOM CAMPBELL: Um, prior to the execution in '99.
11 JEFF MIDDENDORF: So it's been roughly six years since you
12 last looked at that manual?
13 TOM CAMPBELL: Yes, sir.
14 JEFF MIDDENDORF: Um, and you said that you were a witness
15 to the Eddie Lee Harper execution, is that correct?
16 TOM CAMPBELL: Yes, sir.
17 JEFF MIDDENDORF: Okay. And where

were you located during
18 that, that execution?
19 TOM CAMPBELL: In the, uh, witness room.
20 JEFF MIDDENDORF: So you were able to, to see Mr. Harper during
21 that time?
22 TOM CAMPBELL: Yes, sir.
23 JEFF MIDDENDORF: Okay. Uh, how far would you estimate you
24 were from him?
25 TOM CAMPBELL: Probably about this distance to the table.
26 JEFF MIDDENDORF: Okay. Were you able to –

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1 TOM CAMPBELL: (Inaudible/mixed voices)
2 JEFF MIDDENDORF: I know that you all are – are able to
3 communicate with each other. Were you able to hear when the
4 Warden said, "Proceed."
5 TOM CAMPBELL: Yes, sir.
6 JEFF MIDDENDORF: Okay. And how long after Phil Parker said
7 "Proceed" did you witness Mr. Harper close his eyes and appear to
8 go to sleep?
9 TOM CAMPBELL: It was a very short period of time. I'm not
10 exactly sure.
11 JEFF MIDDENDORF: Would you say within a matter of seconds?

TOM CAMPBELL: Uh, probably 30 seconds or less.
JEFF MIDDENDORF: Okay. After that 30 seconds when he went to sleep, did you see him make any more movements after that?
TOM CAMPBELL: No, sir.
JEFF MIDDENDORF: Did he appear to be in any pain?
TOM CAMPBELL: No, sir.
JEFF MIDDENDORF: Were you able to see where the needles were inserted into Mr. Harper's arm and also hand?
TOM CAMPBELL: I was trying to remember that before, but I believe that there was a sheet. I, I really can't remember. I –
JEFF MIDDENDORF: Okay.
TOM CAMPBELL: It seems like there may have been a sheet there. I'm not sure.
JEFF MIDDENDORF: Do you recall seeing any swelling around the arm where, where the needles were inserted?

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TOM CAMPBELL: No, sir.
JEFF MIDDENDORF: That's all the questions I have.
JUDGE ROGER CRITTENDEN: Mr. Shouse?
THEODORE S. SHOUSE: Just a couple.

Judge. Do you have any
medical training, Mr. Campbell?
TOM CAMPBELL: No, sir.
THEODORE S. SHOUSE: Any medical education?
TOM CAMPBELL: No, sir.
THEODORE S. SHOUSE: Any training in anesthesiology?
TOM CAMPBELL: No, sir.
THEODORE S. SHOUSE: Have you ever heard of something called
"anesthesia awareness"?
TOM CAMPBELL: Um, no, sir.
THEODORE S. SHOUSE: Have you ever heard of something called
"conscious paralysis"?
TOM CAMPBELL: No, sir.
THEODORE S. SHOUSE: Okay. Uh, did you actually see the
needles inserted into Mr. Harper?
TOM CAMPBELL: No, sir.
THEODORE S. SHOUSE: And why not?
TOM CAMPBELL: Uh, if I remember right, that was done prior
to the curtain being opened.
THEODORE S. SHOUSE: Thank you. I have nothing further.
JUDGE ROGER CRITTENDEN: Anything further?
JEFF MIDDENDORF: No further questions, Judge.
JUDGE ROGER CRITTENDEN: Thank you. You are excused.

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THEODORE S. SHOUSE: Good morning, sir.
WILLIAM HENDERSON: Good morning.
THEODORE S. SHOUSE: Would you please state your name for the record?
WILLIAM HENDERSON: Uh, William E. Henderson.
THEODORE S. SHOUSE: Excuse me. And where to you live, Mr. Henderson?
WILLIAM HENDERSON: Uh, Lyon County.
THEODORE S. SHOUSE: How are you employed?
WILLIAM HENDERSON: I'm retired.
THEODORE S. SHOUSE: Okay, from where?
WILLIAM HENDERSON: Kentucky State Penitentiary.
THEODORE S. SHOUSE: All right. How were you employed from 1996 through 2004?

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WILLIAM HENDERSON: Uh, Deputy Warden of, uh, Security at the Penitentiary.
THEODORE S. SHOUSE: Okay. Uh, what's your education, Mr. Henderson?
WILLIAM HENDERSON: I have a high school – I'm a high school graduate.

THEODORE S. SHOUSE: Okay. Do you have any medical training?

WILLIAM HENDERSON: No, I do not.

THEODORE S. SHOUSE: Or any training in anesthesiology?

WILLIAM HENDERSON: No, I do not.

THEODORE S. SHOUSE: Okay. Now, um, do you recall when – and I'm not asking for an exact date, I'm just asking do you recall when within the course of your career that, uh, the State of Kentucky adopted lethal injection as a form of execution?

WILLIAM HENDERSON: If my memory serves me correctly, it was March of '98.

THEODORE S. SHOUSE: Okay. And you were the Deputy Warden for Security at that time?

WILLIAM HENDERSON: That's correct.

THEODORE S. SHOUSE: Okay. Now, were there discussions on how the Penitentiary was going to carry out this new mandate?

WILLIAM HENDERSON: I, I guess – and I guess I'm interpreting your question, there – certainly there was discussions on how we would carry it out and, and decisions made.

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protocol, uh, adopted – for lack of a better word – on how we would accomplish, uh, such a task.

THEODORE S. SHOUSE: Okay, well, let's back up for a minute and talk just a little bit about, um, because you and I are familiar with these things, but the Court might not be, okay?

WILLIAM HENDERSON: Okay.

THEODORE S. SHOUSE: Um, what's the command structure at the Penitentiary? There's a War- – there's a Warden.

WILLIAM HENDERSON: There's a Warden and three Deputy Wardens, and each one of the Deputy Wardens has then a specific area of responsibility.

THEODORE S. SHOUSE: Okay, you were the Deputy Warden for Security at that time?

WILLIAM HENDERSON: That's correct.

THEODORE S. SHOUSE: What are the duties of the other two Deputy Wardens?

WILLIAM HENDERSON: Uh, they change from time to time, but, uh, basically one of them is over, uh, uh, Programs, and the other one is over Support Services.

THEODORE S. SHOUSE: Okay. Okay. Now who was the Warden at the time Kentucky switched to le- – or didn't switch, but adopted lethal injection?

WILLIAM HENDERSON: Uh, Phil Parker.

THEODORE S. SHOUSE: All right. So were there discussions between you and the other two Deputy Wardens and Warden Parker about how to make this thing work?

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WILLIAM HENDERSON: Certainly.

THEODORE S. SHOUSE: Okay. Now was that, uh, was that a – what role did you play in those discussions?

WILLIAM HENDERSON: Those discussions occurred over a period of time, uh, from actually, uh, I guess, making a suggestion as to "Here's – here's how we should accomplish this," to, uh, brainstorming as to how we would accomplish something, uh, evaluate some information we had obtained from somebody else. Uh, uh, how – I don't know whether I answered your question or not.

THEODORE S. SHOUSE: Yes, you are. You had what kind of source material? You said you evaluated some

material. What
13 kind of source material did you look at?
14 WILLIAM HENDERSON: We, we had garnered information from,
15 uh, from other states, uh, specifically, uh, Indiana, uh,
16 Virginia, and Georgia, uh, that I've got knowledge of, uh, and
17 there was some, some other information. Uh, I think Al- –
18 Alabama, I don't know whether I mentioned Alabama. Uh, and
19 probably some other states, uh, that I don't recall.
20 THEODORE S. SHOUSE: Okay. Did you all conduct any
21 scientific tests?
22 WILLIAM HENDERSON: In regards to, well, no. I was – I was
23 not involved in the scientific tests.
24 THEODORE S. SHOUSE: Okay. Do you know if any doctors were
25 consulted?
26 WILLIAM HENDERSON: Uh, no I do not.

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1 THEODORE S. SHOUSE: Okay, do you know if any scientific
2 literature, any articles or anything were looked at?
3 WILLIAM HENDERSON: Uh, specifically no.
4 THEODORE S. SHOUSE: Okay. So it was the protocols of other

states that you were primarily looking at?
WILLIAM HENDERSON: Yes.
THEODORE S. SHOUSE: Okay. Any – anything else, other than other states' protocols?
WILLIAM HENDERSON: Well, you know, we looked at their protocol, and then certainly we looked at the operation of our, our facility, I mean, which, uh, some other state's protocol didn't necessarily fit our institutional operation, so we certainly looked at our institutional operation, and at the location of equipment, buildings, access, uh, uh, I guess the whole, the whole – all the information we had we looked at.
THEODORE S. SHOUSE: Okay. And, and all that information was other states' protocols?
WILLIAM HENDERSON: Now I'm not necessarily saying that.
THEODORE S. SHOUSE: Okay.
WILLIAM HENDERSON: I'm saying that we looked at all other states that we had.
THEODORE S. SHOUSE: Okay.
WILLIAM HENDERSON: I'm not saying that's all we looked at. That's all I recall we looked at.
THEODORE S. SHOUSE: Got it. All you recall is other

26 states' protocols.

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1 WILLIAM HENDERSON: And the information that we personally
2 had, the Warden personally had, who –. He had worked in other
3 states; he had obtained some other information. We, you know, he
4 certainly had a, a lot of information that he threw out, so.
5 THEODORE S. SHOUSE: Okay, so other states' protocols. And
6 then, of course, your own professional experience brought to bear
7 on this.
8 WILLIAM HENDERSON: I guess that would be a fair –
9 THEODORE S. SHOUSE: Okay. Okay.
10 WILLIAM HENDERSON: That would be a fair answer to my
11 question.
12 THEODORE S. SHOUSE: I understand. So, um, uh, is it fair
13 to say that you borrowed from some other states' protocols?
14 WILLIAM HENDERSON: I'd say it'd be fair that we borrowed,
15 we adopted, uh, we changed, we added, we certainly utilized all
16 the materials we had to adopt our protocol.
17 THEODORE S. SHOUSE: All right. How did you get these other

states' protocols?
WILLIAM HENDERSON: Uh, the ones that I know about, we, I, I actually went to, uh, Georgia, Virginia, and, uh, and Indiana. Uh, basically onsite visits. Uh, some of them probably gave us a little bit of written information, what they had. By and large, we found that most of them did not have a lot of written information, uh, but they did share with us how they done things. So, uh, uh, what they gave us in writing, we took what they verbally gave us, we certainly made note of, or mental note of,

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or a note of, and brought it back and, and, and hashed it over and either decided to use it, not use it, adapt it, uh, that our, our specific need.
THEODORE S. SHOUSE: Okay, a couple of things there. Some states had more printed information than others.
WILLIAM HENDERSON: Correct.
THEODORE S. SHOUSE: Okay. And then you all collected these other protocols, from other states.
WILLIAM HENDERSON: We collected some

information, what, I
mean –
THEODORE S. SHOUSE: Okay.
WILLIAM HENDERSON: Certainly they didn't, nobody, no
institution or no state that I'm aware of had near what Kentucky
developed.
THEODORE S. SHOUSE: Okay. All right. So you, you expanded
upon what you were provided by these other states?
WILLIAM HENDERSON: I guess that'd be a fair answer.
THEODORE S. SHOUSE: All right. Who wrote Kentucky's first
protocol?
WILLIAM HENDERSON: I don't, I don't, you know, I, I don't
know whether you could call it a "protocol" or not. We had a
checklist that we made out, and that was a – that was a group
effort that went on for an extended period and I – of time, and
I'm assume probably still going on to this day, because, uh,
things change, names change, phone numbers change, uh, building
location changes. Uh, we developed that on an ongoing basis,

and it involved everybody from the Secretary of Corrections –
or Secretary of Justice at that time, who was Dan Cherry, down
to, uh, you know, Shift Captains, Lieutenants, uh, myself –
primarily, I guess, to three people or four people that developed
that checklist was the Warden and the three Deputies.
THEODORE S. SHOUSE: Okay. Who were the other two, uh,
Deputy Wardens other than yourself at the time?
WILLIAM HENDERSON: Uh, Glenn Haeberlin and, uh, Steve
{Bago} initially.
THEODORE S. SHOUSE: Okay, and Mr. Haeberlin's the Warden
now?
WILLIAM HENDERSON: That's correct.
THEODORE S. SHOUSE: Okay. Are you aware of any medical
training any of those other gentlemen may have had?
WILLIAM HENDERSON: No, I – no, I'm not.
THEODORE S. SHOUSE: Okay. All right. Um, do you know what
drugs are used in a lethal injection in Kentucky?
WILLIAM HENDERSON: Uh, I know the names of them, yes.
THEODORE S. SHOUSE: Okay. What are they?

WILLIAM HENDERSON: Uh, {pamlin}, uh, potassium chloride, and, uh, uh, sodium pentothal.

THEODORE S. SHOUSE: Okay. Do you know why those three drugs were chosen?

WILLIAM HENDERSON: Uh, no, I do not.

THEODORE S. SHOUSE: Okay. Um, do you know what they do, what each one of those does?

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WILLIAM HENDERSON: Not, not from a medical stand point of view. I mean, I, I can tell you what I understand that they do. But do I know for a fact what they do? I do not.

THEODORE S. SHOUSE: Okay. Um, now these drugs are administered in prescribed amounts, is that correct?

WILLIAM HENDERSON: There is a dosage amount, correct.

THEODORE S. SHOUSE: That's what I'm getting at. Uh, do you know how that dosage – how those dosage amounts were selected?

WILLIAM HENDERSON: No, I do not.

THEODORE S. SHOUSE: Okay. Um, I think I asked you this. Did you, did you conduct any scientific tests in coming up with

this?
WILLIAM HENDERSON: No. No, none that I'm aware of.
THEODORE S. SHOUSE: Okay. Now, um, what determines the length of the protocol that you eventually came up with? I mean, was there a page – self-imposed page limit, or –?
WILLIAM HENDERSON: I don't remember exactly when we came up with the, uh, with, with a date, but we started looking at a 30-day window, for lack of a better word. We get an Execution Order 30 days out. What would we do from 30 days down to the time of the execution was carried out. So I guess, I guess the 30-day window was the driving, driving force behind what we would develop as far as what we needed to do in addition to normally running your institution, uh, or what was unique specifically to an execution that needed to go on that checklist.

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THEODORE S. SHOUSE: Okay. Um, is it fair to say that only the most important things go in the protocol? And what I'm

getting at, do you recall – at your deposition, you said that if you put everything in there, you'd have a book that would fill up a room.

WILLIAM HENDERSON: That, that's correct. But, but to say the only important things that went in there would be probably incorrect.

THEODORE S. SHOUSE: Okay.

WILLIAM HENDERSON: The important things that needed to be done got in there. There might have been a – if, if you went ahead and developed another list of, of what needed to be done, it may very well be you would generate another one. In other words, you would never – you would never stop generating a list if you generated a list of what you needed to get done, and then you generated another list on how you was going to get that done, and then you generate another list on how you was going to get all that done. So, I, I don't know whether that confused you or not, but –

THEODORE S. SHOUSE: No, that's okay.

WILLIAM HENDERSON: But the point that, you know, we needed to do this. That might got on the list. What

all you had to do
to get that done did not get on the list.
THEODORE S. SHOUSE: Okay. Just one second please. Let's
see if I can find my place here. Okay, so everything that – that
needed to get done needed to go in the protocol?

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WILLIAM HENDERSON: Yeah, I think that's what our effort –
well, every, every major event or thing that we need to
accomplish, we tried to get in that protocol.
THEODORE S. SHOUSE: Okay.
(Background conversation)
JEFF MIDDENDORF: Judge, they – if they want to ask him
questions about the new protocol, he wasn't there at the time,
when that protocol was drafted.
THEODORE S. SHOUSE: No, it's –
JEFF MIDDENDORF: I mean, if they want to ask him about the
old protocol, that's one thing.
THEODORE S. SHOUSE: I'm going to ask him about the diff- –
a difference between the protocol that was there and the protocol
that's there today.
JEFF MIDDENDORF: He wasn't there for the thought process of

why it was changed.
JUDGE ROGER CRITTENDEN: Well, he may not be asking about
the thought process.
THEODORE S. SHOUSE: No, I'm not asking about the thought
process.
JUDGE ROGER CRITTENDEN: He doesn't know (inaudible).
THEODORE S. SHOUSE: Um, but given our prior agreement
before the hearing began, I'd like to mark "The Execution Lethal
Injection," Revised 12/14/2004, consisting of nine pages as
Plaintiffs' Exhibit #1.
JUDGE ROGER CRITTENDEN: Okay, now is that the protocol?

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THEODORE S. SHOUSE: That's the new one.
JUDGE ROGER CRITTENDEN: That's the new protocol.
JEFF MIDDENDORF: That's the current one. Okay. May I
approach the witness?
JUDGE ROGER CRITTENDEN: All right.
THEODORE S. SHOUSE: Would you take a look at that,
Mr. Henderson? All right, what's the title of that document?
WILLIAM HENDERSON: Uh, the title?
JUDGE ROGER CRITTENDEN: Excuse me,

Mr. Henderson. Is this
10 the new redacted protocol?
11 THEODORE S. SHOUSE: This is the new one that's been turned
12 over. There's nothing redacted from this document.
13 JUDGE ROGER CRITTENDEN: But this is the document that's
14 been given to you?
15 THEODORE S. SHOUSE: Yes, sir. That's correct. Yes, Your
16 Honor.
17 JUDGE ROGER CRITTENDEN: Is this the one that's sealed or
18 not sealed? This is not the sealed? They're all sealed, but –
19 JEFF MIDDENDORF: There were – this part of the protocol
20 that he's referring to didn't have any redacted portions I don't
21 believe.
22 JUDGE ROGER CRITTENDEN: Okay. All right, go ahead.
23 THEODORE S. SHOUSE: I'm sorry. What was the title of that
24 document, Mr. Henderson?
25 WILLIAM HENDERSON: Uh, "The Execution Lethal Injection."

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1 THEODORE S. SHOUSE: All right. When was this produced?
2 What – when does it say it was produced, in

the upper right-hand
corner?
WILLIAM HENDERSON: Uh, it's revised, uh, 12/14/04.
THEODORE S. SHOUSE: Okay. Can you turn to page 6 of that
document, please?
WILLIAM HENDERSON: Page 6?
THEODORE S. SHOUSE: Yes, sir, #18 on the sequence of
events.
WILLIAM HENDERSON: Okay.
THEODORE S. SHOUSE: Could you read #18 please?
WILLIAM HENDERSON: "A designated team member will observe
the heart monitor and advise the physician of cessation of
electrical activity of the heart."
THEODORE S. SHOUSE: Okay, great. Judge, may I approach
again?
JUDGE ROGER CRITTENDEN: Yes.
THEODORE S. SHOUSE: Thanks a lot. I'll give that to the
Court.
JUDGE ROGER CRITTENDEN: Thank you.
THEODORE S. SHOUSE: Thank you. Okay, now this one I've
only got a single copy of. What, uh, what's this document
titled?
WILLIAM HENDERSON: Uh, "IV Team Checklist."

THEODORE S. SHOUSE: And what's the date up there where it says "Revised"?

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WILLIAM HENDERSON: April 9th, '98.
THEODORE S. SHOUSE: Okay, and where – how were you employed in April of '98?
WILLIAM HENDERSON: Deputy Warden for Security.
THEODORE S. SHOUSE: All right. Now I'm going to turn to page 14 of this one, all right? Okay, when was this revised?
WILLIAM HENDERSON: Uh, M. 14th, '99.
THEODORE S. SHOUSE: Okay. Um, were you employed as Deputy Warden at that time?
WILLIAM HENDERSON: That's correct.
THEODORE S. SHOUSE: Okay. When was Mr. Harper's execution?
WILLIAM HENDERSON: May the 25th, '99.
THEODORE S. SHOUSE: Okay. Could you read #66, please?
WILLIAM HENDERSON: "A designated – a designated team member trained on the use of a heart monitor will observe the heart monitor and advise the physician of cessation of electrical activity of the heart."
THEODORE S. SHOUSE: Okay. so as of May

the 14th of '99, it
19 includes the language "team member trained on the use of a heart
20 monitor," is that correct?
21 WILLIAM HENDERSON: Yes.
22 THEODORE S. SHOUSE: Does that language appear on the
23 current protocol?
24 WILLIAM HENDERSON: Uh, as I recall, no.
25 THEODORE S. SHOUSE: No? Okay. Do you have any idea why
26 that language was deleted?

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1 WILLIAM HENDERSON: No.
2 THEODORE S. SHOUSE: Okay. But that's different, right?
3 WILLIAM HENDERSON: Uh, yes.
4 THEODORE S. SHOUSE: And as we just talked about, all the
5 things that need to get done are in the protocol.
6 WILLIAM HENDERSON: Uh, I, I said we tried to get everything
7 in, in the protocol, not necessarily that we did or – but that,
8 that that effort was made.
9 THEODORE S. SHOUSE: Okay. So at the time of Mr. Harper's
10 execution, a – the team member was required to be trained in
11 using a heart monitor?
12 WILLIAM HENDERSON: I don't know.

"trained" is probably –
13 THEODORE S. SHOUSE: Well, I'm, I'm sorry –
14 WILLIAM HENDERSON: You know, my definition of being
15 "trained" is somebody that knows how to read, you know, how to
16 look at the thing and tell you whether it's, uh, operational, uh,
17 you know, whether you're getting a, a heartbeat or now. Now, you
18 know, what – somebody else's definition of "trained" may very
19 well be something different, so.
20 THEODORE S. SHOUSE: Well, let me ask you this. Do you
21 recall on, uh, January the 5th of this year, when I came down
22 to Eddyville and deposed you in a conference room at the
23 Penitentiary?
24 WILLIAM HENDERSON: I remember being at, being at – yes,
25 sir.

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1 THEODORE S. SHOUSE: Okay. All right. Do you remember – do
2 you remember saying then that you thought that the person who
3 read the heart monitor at least ought to have read the owner's
4 manual?

WILLIAM HENDERSON: That's correct. I believe that was my –
I believe you're exact- – exactly, they ought to have some
familiarity with it.
THEODORE S. SHOUSE: Right. "Reading the owner's manual," I
believe was your words. Okay, so in '99, the person had to be
trained in how to read a heart monitor.
WILLIAM HENDERSON: I mean, uh, that was the terminology
used but, there again, I, I, you know, I don't know what your
definition of a "trained" is, but I think our definition of
"trained" was familiar with how to read it, just, just to the
point of being able to say, you know, "To me, it looks like
they're, you know, the heart's at a point that I need to call
the physician," who I think is probably the trained individual.
THEODORE S. SHOUSE: Okay.
WILLIAM HENDERSON: Uh, that certainly could certify death
off of the heart monitor.
THEODORE S. SHOUSE: And in the current protocol, revised
in December of last year, that training requirement has been
deleted, is that correct?
WILLIAM HENDERSON: That word is gone,

yes.
25 THEODORE S. SHOUSE: Yes, sir. Okay. Can I, uh, please
26 enter this 1998 protocol "IV Team Checklist" as Plaintiffs' #2?

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1 JUDGE ROGER CRITTENDEN: Certainly.
2 THEODORE S. SHOUSE: May I approach?
3 JUDGE ROGER CRITTENDEN: Yes, sir.
4 THEODORE S. SHOUSE: Thank you. Okay. I've got to get
5 myself resituated here. Okay. Do you think that monitoring the
6 heart monitor – observing the heart monitor is an important part
7 of an execution by lethal injection?
8 WILLIAM HENDERSON: It's im- – it's important only to the,
9 and to the extent of when you're going to call the doctor to come
10 in rather than the doctor standing there and do it, that somebody
11 else comes in and does it, so.
12 THEODORE S. SHOUSE: Okay. Okay.
13 WILLIAM HENDERSON: Is, is it important? Only to that
14 degree.
15 THEODORE S. SHOUSE: Okay. All right. Uh, were you present
16 for the execution of Mr. Harper, Eddie Lee Harper?
17 WILLIAM HENDERSON: Yes.

THEODORE S. SHOUSE: Okay. Do you know who supervised the mixing of the drugs that were injected into Mr. Harper?

WILLIAM HENDERSON: Yes and, and no.

THEODORE S. SHOUSE: Okay.

WILLIAM HENDERSON: And yes, by I mean IV Team members.

THEODORE S. SHOUSE: Okay, I'm not talking about IV Team members. I'm sorry. Just for purposes – let's be really careful here, Mr. Henderson. Do you remember the deposition when I came down on January the 5th?

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WILLIAM HENDERSON: Yes.

THEODORE S. SHOUSE: Do you remember a discussion we had then about not giving names or ranks or any identifying information on anybody who may or may not be a member of the Execution Team?

WILLIAM HENDERSON: Yes.

THEODORE S. SHOUSE: Okay, do you remember how we talked about how we have divided, for purposes of this litigation, that Execution Team into three components: There's the, the –

WILLIAM HENDERSON: I don't think we

discussed that at all.
THEODORE S. SHOUSE: Okay. Well, I just want to make sure
that you're clear that there's the IV Team – well, there's the
Execution as a whole, and then within that, there are two
subsets, there's the Exe- – what we have come to refer to as
the Executioner and the IV Team.
WILLIAM HENDERSON: Okay.
THEODORE S. SHOUSE: Okay? I want to be really clear. I
don't want the names, ranks, I don't even want to know if they're
within – whether they're uniformed members of the Department of
Corrections or not. Okay? The people that are on that team,
we're not going to talk about them, all right?
WILLIAM HENDERSON: Okay.
THEODORE S. SHOUSE: All right. I'm only talking about the
supervisor. Do you know who supervised the mixing of the drugs
that were injected into Mr. Harper?

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WILLIAM HENDERSON: I know that Deputy Commissioner Tom
Campbell went over there and was there when they were put in the
syringes. So if you want to call that the

"supervisor," Tom
Campbell.
THEODORE S. SHOUSE: That's exactly what I was looking for,
thank you. Now do you know if there were any problems siting the
IVs on Mr. Harper?
WILLIAM HENDERSON: Uh, there was none that I was – I was
aware of.
THEODORE S. SHOUSE: Well, were they able to get them both
in their first choice?
WILLIAM HENDERSON: Uh, no.
THEODORE S. SHOUSE: Okay. That's what I was getting at.
Okay. Judge, I'm now going to go through with Mr. Henderson
what's been labeled "Control Chemical Disposition Record,"
Kentucky Department of Corrections, page 2. Can we mark that
as Plaintiffs' 3?
JUDGE ROGER CRITTENDEN: Sure.
THEODORE S. SHOUSE: May I approach the witness?
JUDGE ROGER CRITTENDEN: Please?
THEODORE S. SHOUSE: Okay, now, again, there's, well, please
– just ask the questions I – answer the questions I ask, okay?
WILLIAM HENDERSON: Um-hm [yes].
THEODORE S. SHOUSE: Okay. Okay, can you turn to page 2 of

that three-page document I've just handed to you?
WILLIAM HENDERSON: Okay.

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THEODORE S. SHOUSE: Okay. What's page 2 titled?
WILLIAM HENDERSON: Uh, "Lethal Injection IV Site Placement."
THEODORE S. SHOUSE: And what's the date at the top of that?
WILLIAM HENDERSON: Uh, May 25th, '99.
THEODORE S. SHOUSE: And is there a name and an inmate number under that?
WILLIAM HENDERSON: Yes.
THEODORE S. SHOUSE: Who's name and inmate number appears there?
WILLIAM HENDERSON: Uh, Edward Harper, 32818.
THEODORE S. SHOUSE: Okay. And then, um, just a moment. Judge, may I approach?
JUDGE ROGER CRITTENDEN: Yes. Did you mark this?
THEODORE S. SHOUSE: He has the marked copy, Judge. Okay, and underneath that what appears?
WILLIAM HENDERSON: Uh, a diagram or a depiction of the human body, one of them marked "front" and

one of them marked
19 "rear."
20 THEODORE S. SHOUSE: Okay, let's talk about the one marked
21 "front" first. Uh, on what would be the right arm, what is –
22 what is notated there?
23 WILLIAM HENDERSON: Uh, looks like C-18GX one and one-
24 quarter, 708BM.
25 THEODORE S. SHOUSE: Okay, but then on the arm itself,
26 what's marked there?

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1 WILLIAM HENDERSON: A "P."
2 THEODORE S. SHOUSE: Okay. And is there a code down there?
3 WILLIAM HENDERSON: Uh, yes.
4 THEODORE S. SHOUSE: Okay. And what does that "P" with a
5 circle around it mean, referring to the code?
6 WILLIAM HENDERSON: Line successfully placed.
7 THEODORE S. SHOUSE: Okay, now still looking at the, um, at
8 the front part, on the, um, left arm, what is marked there at the
9 elbow?
10 WILLIAM HENDERSON: Uh, an "X," with a "AF."
11 THEODORE S. SHOUSE: Okay, "AF" is next to that. Okay. Now

is there any code down here for an "X"?
WILLIAM HENDERSON: Uh, "AF, attempt failed."
THEODORE S. SHOUSE: Attempted, failed. Okay. Now let's switch over here to the rear side, the rear diagram. Are you with me? Okay. On the right hand – or, excuse me, on what would be the left hand, what is – what is notated there?
WILLIAM HENDERSON: Just on the hand? A "P."
THEODORE S. SHOUSE: A "P." Okay, and again, we're already gone through this, but that – what does the "P" mean?
WILLIAM HENDERSON: Uh, line successfully placed.
THEODORE S. SHOUSE: Okay, so does your recollection and does this document support that a line was attempted to be started in Mr. Harper's left elbow, that was attempted and failed, and so they switched over to his hand.
WILLIAM HENDERSON: That's correct.

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THEODORE S. SHOUSE: Okay. And is that your recollection of –
WILLIAM HENDERSON: That's correct.

THEODORE S. SHOUSE: – what happened? Okay. How long did that take, that failure and moving over there?

WILLIAM HENDERSON: A very short period of time. Uh, uh, I mean, from my per- – my perspective, I'd say one attempt in the left, bend of the left, left arm –

THEODORE S. SHOUSE: Um-hm.

WILLIAM HENDERSON: Uh, obviously was unsuccessful in hitting the vein. They immediately removed that and moved to the back of the left hand and made an attempt and were successful at, uh, at, at getting the IV started.

THEODORE S. SHOUSE: Okay, so there was – there was at least a problem, if I can use that word, in siting one of the IVs?

WILLIAM HENDERSON: I would say there was a, yeah, obviously there was attempt made in the left – in the bend of the left arm. They were unsuccessful. So you can call it a problem if you want.

THEODORE S. SHOUSE: Okay.

WILLIAM HENDERSON: Uh, they removed that and went to the back of the left hand and were successful.

THEODORE S. SHOUSE: Okay. Now, again, with those caveats we talked about earlier as far as names and

identifying
25 information and things, do you know that the two members of the

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1 IV Team who participated in the execution of Mr. Harper had
2 medical training?
3 WILLIAM HENDERSON: It's my understanding that they both
4 did, yes.
5 THEODORE S. SHOUSE: Okay. So someone with medical training
6 had a problem inserting the IV in Mr. Harper's left arm?
7 WILLIAM HENDERSON: Uh, there again, you keep referring to
8 it as, as a problem. I, you know, I would say it's an
9 unsuccessful attempt, uh –
10 THEODORE S. SHOUSE: Okay.
11 WILLIAM HENDERSON: – I think would be better terminology
12 than a "problem."
13 THEODORE S. SHOUSE: Okay. Someone with medical tr- – that
14 you know to have had some level of medical training had an
15 unsuccessful attempt in placing one of the IVs in Mr. Harper.
16 WILLIAM HENDERSON: That's correct.
17 THEODORE S. SHOUSE: Okay. Now I'd like to refer you to the

page 3 of that same document, Plaintiffs' 3, I think it is. Okay? Does a name and an inmate number appear at the top of page 3?

WILLIAM HENDERSON: Edward Harper.

THEODORE S. SHOUSE: And what's the inmate number?

WILLIAM HENDERSON: 32818.

THEODORE S. SHOUSE: Okay, and what's the date on that?

WILLIAM HENDERSON: May 25th, '99.

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THEODORE S. SHOUSE: Okay. What is this -- what is this document?

WILLIAM HENDERSON: Uh, it looks like it's not entitled anything, but it's, uh, it, it, it gives you information on, uh, when, uh,when, uh, Inmate Harper was escorted into the chamber, what time the IV was started in the left, uh, the left IV was started, the right IV was started, the injection began, uh, and then gives you the list of the, uh, chemicals that we used and, then, uh, the time he was pronounced dead.

THEODORE S. SHOUSE: Okay, let's talk about that in some detail for just a moment. Not so much when

he was escorted into
the chamber and when the IVs were begun, um, although those speak
for themselves. Where it says "injection begun," what time is
written there?
WILLIAM HENDERSON: 7:16 p.m.
THEODORE S. SHOUSE: Okay. First of all, and again, without
name – giving any identifying information, do you know who
prepared this piece of paper, who filled in these blanks?
WILLIAM HENDERSON: No, I do not.
THEODORE S. SHOUSE: Okay. Injection begun, what time
again?
WILLIAM HENDERSON: 7:16.
THEODORE S. SHOUSE: Okay. And then underneath that,
there's two columns, First Round, Second Round, right?
WILLIAM HENDERSON: Correct.

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THEODORE S. SHOUSE: And under sodium thiopental, what time
did that begin?
WILLIAM HENDERSON: Uh, first round, 7:16. Second round,
7:18.
THEODORE S. SHOUSE: Okay. And that 7:16, that's the same

sign – same time, rather, as injection begun?
WILLIAM HENDERSON: That's correct.
THEODORE S. SHOUSE: Okay. Now jump all the way down, well, let's go to potassium chloride. When was the last potassium chloride injection given?
WILLIAM HENDERSON: 7:22.
THEODORE S. SHOUSE: Okay, and that is, it's six minutes after the first round of sodium thiopental, is that correct?
WILLIAM HENDERSON: Um, that's correct.
THEODORE S. SHOUSE: And then we have "Pronounced Dead at," and what, what time is written there?
WILLIAM HENDERSON: 7:28.
THEODORE S. SHOUSE: Okay. So from the time the sodium thiopental, the first injection of sodium thiopental began, until Mr. Harper was pronounced dead, how much time elapsed?
WILLIAM HENDERSON: Um, 12 minutes.
THEODORE S. SHOUSE: Okay. Now again, I'm not going to ask you who it is, but are there initials written next to 7:28 on "Pronounced Dead"?
WILLIAM HENDERSON: There, uh, I don't think that's initials.

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THEODORE S. SHOUSE: Or is it "p.m."?
WILLIAM HENDERSON: I think it's p.m.
THEODORE S. SHOUSE: That's p.m. Okay.
WILLIAM HENDERSON: I believe it is. I –
THEODORE S. SHOUSE: Okay.
WILLIAM HENDERSON: That's what I would take it as.
THEODORE S. SHOUSE: All right, you take it as "p.m." Okay.
So, again, 12 minutes for Mr. Harper to die, is that correct?
WILLIAM HENDERSON: Uh, correct.
THEODORE S. SHOUSE: Okay. Um, how close to Mr. Harper were
you when the chemicals were injected into him?
WILLIAM HENDERSON: Well, standing in the room with him. I,
I'd say within two to three feet of him. I mean, I –
THEODORE S. SHOUSE: Two to three feet.
WILLIAM HENDERSON: I was pretty close.
THEODORE S. SHOUSE: And you watched him die.
WILLIAM HENDERSON: That's correct.
THEODORE S. SHOUSE: Okay. Just one second please. Did you
go to Georgia to research, uh, how executions were conducted
there?
WILLIAM HENDERSON: I went to, uh, yeah,

I guess you could
call it research. Yes, I went to Georgia.
THEODORE S. SHOUSE: Okay. Was an execution conducted while
you were at the penitentiary in Georgia?
WILLIAM HENDERSON: No. No, there was not.

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THEODORE S. SHOUSE: Okay. Do you know what Georgia's
method of execution was when you went there?
WILLIAM HENDERSON: Uh, it was electrocution.
THEODORE S. SHOUSE: Electrocution. Okay. So Georgia did
not play a part in your analysis of how to conduct lethal
injections in Kentucky.
WILLIAM HENDERSON: Uh, well there again, the answer is yes
and no. I mean, a lot – a lot of the protocol we use to get
right up to the point of doing the actual execution is the same
that – and some of that stuff is the same, whether you're doing
electrocution or lethal injection. Some of the things you got to
do in your facility, staffing and all – and a lot of the stuff
you got on the checklist is the same. So –
THEODORE S. SHOUSE: Sure. Okay, I want

to make that –

WILLIAM HENDERSON: – yes and no.

THEODORE S. SHOUSE: I want to make that clear. Sure.

Thank you for bringing that up. Now the, the two portions of the

protocol that have been introduced into the record, the old one,

the new one, regarding the heart monitor –

WILLIAM HENDERSON: Um-hm [yes].

THEODORE S. SHOUSE: – those are small portions of much

larger documents, right?

WILLIAM HENDERSON: That's correct.

THEODORE S. SHOUSE: Okay. I mean, in fact, um, I mean

in fact, this, if, if – may I approach? I mean, there are

16 chapters, if you will, in, in this document. Is that –?

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WILLIAM HENDERSON: That, yeah, it looks – yeah.

THEODORE S. SHOUSE: This is a big document. And these

portions that I've talked about with you are just much smaller

parts of a large – of a larger document, right?

WILLIAM HENDERSON: That's correct.

THEODORE S. SHOUSE: Okay. And, and there's things in here

about internal security, which we're not going

to talk about.
WILLIAM HENDERSON: That's correct.
THEODORE S. SHOUSE: And there's things about staffing and
dealing with the media.
WILLIAM HENDERSON: Absolutely. Absolutely.
THEODORE S. SHOUSE: Witnesses, both for the condemned
inmate and for the –
WILLIAM HENDERSON: Correct.
THEODORE S. SHOUSE: Okay. But, uh, but the part about how
to conduct a lethal injection, Georgia would have had nothing to
do with it.
WILLIAM HENDERSON: That's correct.
THEODORE S. SHOUSE: Okay. Thank you. I have nothing
further.
JUDGE ROGER CRITTENDEN: Okay. Thank you.
JEFF MIDDENDORF: Just a few questions, Your Honor.
JUDGE ROGER CRITTENDEN: Okay, Mr. Middendorf.
JEFF MIDDENDORF: Mr. Campbell, how are you today?
WILLIAM HENDERSON: Henderson.
JEFF MIDDENDORF: I'm sorry, Mr. Henderson. I'm getting –

WILLIAM HENDERSON: Tom's a lot older than I am.
(Inaudible/mixed voices/laughter)
JEFF MIDDENDORF: He would probably like that, wouldn't he?
It's been like a long day already. Uh, let me ask you just a few
quick questions. Uh, who pronounces death in an execution?
WILLIAM HENDERSON: Uh, the Coroner, okay, or the doctor.
Or the doctor and the Coroner together do.
JEFF MIDDENDORF: Does the heart monitor pronounce death?
WILLIAM HENDERSON: No.
JEFF MIDDENDORF: Um, you testified you didn't considering –
consider the, the moving of the hand a problem, is that correct?
WILLIAM HENDERSON: No.
JEFF MIDDENDORF: Okay. Um, is it a fair statement to say
that the IV Team is actually trained to move to the best site?
WILLIAM HENDERSON: Yes.
JEFF MIDDENDORF: And these are the individuals that have
some medical training.
WILLIAM HENDERSON: Yes.
JEFF MIDDENDORF: And so you leave that to the people with
medical training on what is the best site, how long they should
stay at one place or move to the next?

WILLIAM HENDERSON: That's correct.
JEFF MIDDENDORF: Um, and you said you witnessed the execution of Eddie Lee Harper, is that correct?
WILLIAM HENDERSON: That's correct.

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JEFF MIDDENDORF: Okay. Where were – where were you located? I think you said a couple feet, is that –?
WILLIAM HENDERSON: Two to three feet, uh, to the side and then (inaudible) down midways to his body. I mean, he was laying flat and I was, I was midway between probably his waist and his feet, a couple or three feet away from him –
JEFF MIDDENDORF: Okay.
WILLIAM HENDERSON: – basically looking right at him.
JEFF MIDDENDORF: And, and let me back up one second. Uh, Tom Campbell testified that there was a sheet involved in the execution. Do you recall if Mr. Harper was covered with a sheet?
WILLIAM HENDERSON: To my recollection, he was not covered in a sheet.
JEFF MIDDENDORF: Um, now you were able to hear Warden Parker give the command to proceed, correct?

WILLIAM HENDERSON: That's correct.
JEFF MIDDENDORF: Okay. Once that command was given, do you recall how long it took Eddie Lee Harper to close his eyes and go to sleep?
WILLIAM HENDERSON: It was my recollection that he didn't close his eyes. His lies – his eyes remained – I mean, when the drugs started being pushed, his, his eyes began to get – his eyelids began to move slower and slower and slower, his breath got shallow, kept getting shallow. And within 15 or 20 seconds, from my observation, he died.

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JEFF MIDDENDORF: So you didn't see – after 15 or 20 seconds, did you see him breathing at all?
WILLIAM HENDERSON: No.
JEFF MIDDENDORF: Did you see any other movement during the entire course of the execution after?
WILLIAM HENDERSON: No.
JEFF MIDDENDORF: Were you able to see the needles placed in Eddie Lee Harper's arms?
WILLIAM HENDERSON: Yes.
JEFF MIDDENDORF: Did you notice any swelling around the

sites?
WILLIAM HENDERSON: No.
JEFF MIDDENDORF: Notice any leaking?
WILLIAM HENDERSON: No.
JEFF MIDDENDORF: Anything out of the ordinary?
WILLIAM HENDERSON: No.
JEFF MIDDENDORF: And how often did you all practice as
Execution Team members to do – to practice for executions?
WILLIAM HENDERSON: Monthly.
JEFF MIDDENDORF: Okay. Did you walk through a complete
execution during that time?
WILLIAM HENDERSON: Uh, yes and yes.
JEFF MIDDENDORF: Okay. Would you even insert IV lines into
volunteers?
WILLIAM HENDERSON: Yes.
JEFF MIDDENDORF: And who were typically the volunteers?

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WILLIAM HENDERSON: Uh, the staff that were on the team,
from – sometimes it would be the Warden, sometimes it would be
me, sometimes it would be a team member. But somebody within
that group would be – would play the role of the condemned.
JEFF MIDDENDORF: No further questions.

Judge.

JUDGE ROGER CRITTENDEN: Mr. Shouse, anything further?

THEODORE S. SHOUSE: Yes, sir, just a couple. Now, uh, I believe it was the policy of the Penitentiary to have monthly practice sessions on conducting executions while you were there, is that correct?

WILLIAM HENDERSON: That's correct.

THEODORE S. SHOUSE: And did you do the practice sessions the same way every time?

WILLIAM HENDERSON: We did the practices the way we would carry out the execution, so did we do them the same way every time? Yes and No. Sometimes we would practice with a, a cooperative docile inmate; sometimes we would practice with an uncooperative inmate. So, there again, the answer is yes and no. But we generally practice the same way every time? Yes.

THEODORE S. SHOUSE: Okay. Because you wanted it to go, I mean, that's what practice is. You practice and practice and practice so it'll go the same way when the real event occurs.

WILLIAM HENDERSON: That's correct.

THEODORE S. SHOUSE: Okay. And, and

again, you have no
25 medical training.
26 WILLIAM HENDERSON: No. No.

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1 THEODORE S. SHOUSE: And are you familiar with an expression
2 called "anesthesia awareness"?
3 WILLIAM HENDERSON: Nothing other than what I've seen on TV,
4 and I probably wouldn't call that much of an awareness.
5 THEODORE S. SHOUSE: I have no further questions. Thank
6 you.
7 JUDGE ROGER CRITTENDEN: Do you have anything?
8 JEFF MIDDENDORF: Just – just real quick. I want to clear
9 up one thing, Mr. Henderson. You said that you would practice
10 with a, a hostile inmate or somebody that allowed it to take
11 place.
12 WILLIAM HENDERSON: That's correct.
13 JEFF MIDDENDORF: You don't – you mean somebody portraying
14 an inmate, is that correct?
15 WILLIAM HENDERSON: That's correct.
16 JEFF MIDDENDORF: They were team members that you practiced
17 on.
18 WILLIAM HENDERSON: Yes.

JEFF MIDDENDORF: Okay. That's all the questions I have.
JUDGE ROGER CRITTENDEN: Thank you, sir.
THEODORE S. SHOUSE: Judge, given the – uh, I have nothing further.
JUDGE ROGER CRITTENDEN: Okay, thank you. Uh, thank you, Mr. Henderson. You can step down; you're excused.
WILLIAM HENDERSON: Thank you.

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JUDGE ROGER CRITTENDEN: Oh, I understand that. Um, let's try to get about, about 10 minutes of Mr. Parker, and then we'll see how that goes, and then (inaudible). All right, let's call Phil Parker.
(Pause)
JUDGE ROGER CRITTENDEN: Would you raise your hand, please? Do you swear or affirm the entire testimony you're about to give in this matter will be the truth?
PHILIP PARKER: I do.
JUDGE ROGER CRITTENDEN: Be seated, please.
SUSAN J. BALLIET: (Inaudible), Mr. Parker. Could you, um, state your name for the record?

PHILIP PARKER: Philip Parker.
SUSAN J. BALLIET: How are you currently employed?
PHILIP PARKER: I'm not. I'm retired.
SUSAN J. BALLIET: And what was your position before that?
PHILIP PARKER: I was Warden at the Kentucky State Penitentiary.
SUSAN J. BALLIET: When did you become the Warden?
PHILIP PARKER: Uh, March 1993.
SUSAN J. BALLIET: And when did you retire?
PHILIP PARKER: August 2002.
SUSAN J. BALLIET: What were your responsibilities as Warden?
PHILIP PARKER: As Warden, I was responsible for the overall management, and operation of the facility.

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SUSAN J. BALLIET: Was lethal injection a method of execution while you were Warden there?
PHILIP PARKER: Yes, it was.
SUSAN J. BALLIET: Um, I'm going to give you (inaudible/away from microphone). I think this has already been marked and this one is, um, marked as #2.
JEFF MIDDENDORF: Could we see that?

SUSAN J. BALLIET: Yes, you can have it. And the Court already has it.

JUDGE ROGER CRITTENDEN: All right.

SUSAN J. BALLIET: Plaintiffs' #2.

JEFF MIDDENDORF: Judge, just real quick. Before we start going through all this again, you have these depositions. If we're going to start rehashing exactly what happened during every one of these depositions we took, I, I think you ruled on this.

JUDGE ROGER CRITTENDEN: Let's, let's, let's stick to – I thought, I thought the agreement was we were going to stick to areas outside the depositions primarily, or just specific questions.

THEODORE S. SHOUSE: Certainly primarily we are not rehashing the depositions, but there are differences in what the witnesses said.

JUDGE ROGER CRITTENDEN: All right.

SUSAN J. BALLIET: Um, can you identify that document?

PHILIP PARKER: This is "Lethal Injection Actions to be Taken After Receiving an Execution Order."

SUSAN J. BALLIET: Would you agree that's the 1999 execution protocol?

PHILIP PARKER: Yes, it is. I believe it is.

SUSAN J. BALLIET: Is that the, uh, protocol that was in effect at the time of Harper's execution?

PHILIP PARKER: It appears to be.

SUSAN J. BALLIET: Were you involved in the December 2002 revisions to the protocol?

PHILIP PARKER: December 2002?

SUSAN J. BALLIET: This was after you were retired.

PHILIP PARKER: No.

SUSAN J. BALLIET: Not at all. Um, could you look at the checklists that are attached to the 1999 protocol that you're holding, there at the back? Can you tell us why there is a separate IV Team checklist, why that's separate from the protocol?

PHILIP PARKER: Well, now, you have to – (Inaudible/mixed and muffled voices)

JUDGE ROGER CRITTENDEN: (Inaudible) I'm looking at this. It says "IV Team Checklist," Plaintiffs' 2, is that right?

PHILIP PARKER: No, sir. That's not what I'm looking at.

JUDGE ROGER CRITTENDEN: All right.

SUSAN J. BALLIET: In part of 2, yeah, did

you find it
24 (inaudible)?
25 JUDGE ROGER CRITTENDEN: I've got Plaintiffs' 2. I just
26 don't know where are you.

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1 SUSAN J. BALLIET: At the back.
2 JUDGE ROGER CRITTENDEN: Oh, on, on the back part.
3 SUSAN J. BALLIET: It's in the back.
4 JUDGE ROGER CRITTENDEN: Okay.
5 SUSAN J. BALLIET: The checklists are at the back of 2, and
6 attached to that.
7 PHILIP PARKER: Well, how far back?
8 (Inaudible/mixed and muffled voices)
9 SUSAN J. BALLIET: I think that's where it starts.
10 PHILIP PARKER: Okay, I'm with you.
11 SUSAN J. BALLIET: All right. Is there a reason why this is
12 separate? It seems to be that it's – well, if you look at, um –
13 PHILIP PARKER: "Pre-Execution Medical Action Checklist," is
14 that what you're talking about?
15 SUSAN J. BALLIET: There's a "Pre-Execution Medical Action
16 Checklist," and there's an "IV Team Checklist." And what I would
17 like – if I could approach the witness –
18 JUDGE ROGER CRITTENDEN: Go right

ahead.
SUSAN J. BALLIET: Um, (inaudible). If you look at Items 4 through 13 on the "IV Team Checklist," Item 4 starts with "Heart Monitor Tested," "Pre-Execution Medical Exam," "Prepare the Execution Chemicals." Starts talking about the gurney getting prepared, and you go through 16, if you can follow me; 16 is – well, 13 is "Execution Complete." So that on this checklist, would you agree that Items 4 through 13 are pretty much the, the kernel of what is the actual lethal injection, starting with –

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PHILIP PARKER: No.
SUSAN J. BALLIET: – when they move the inmate into the execution room. I'm just asking if that – that's what this part of the checklist addresses.
PHILIP PARKER: No, I wouldn't, I, not necessarily.
SUSAN J. BALLIET: It's not a trick question.
PHILIP PARKER: Well, I'm, I'm not sure I understand your question, but if I do, I, I don't think that's all of the execution is what's in these 12 or 13 items.

SUSAN J. BALLIET: Okay, I'm just – what I'm getting at is that if you look at the, the rest of this protocol, and you look at Items 44 through 67, they pretty much cover the same thing.

PHILIP PARKER: Ma'am, I haven't seen these in years and years and years, so.

SUSAN J. BALLIET: Okay, well, then, I'll save those questions for the current Warden.

PHILIP PARKER: Okay. I'm sorry.

SUSAN J. BALLIET: Who mixed the chemicals that were used to execute Eddie Harper?

PHILIP PARKER: Well, that would have been –

JEFF MIDDENDORF: Judge, just, just so we can jump in here –

JUDGE ROGER CRITTENDEN: So he doesn't name a name, that's right. I, we, we've agreed to that, that the IV Team and the, uh, the Execution Team members, outside of the general management of the institution, will not be named, and the positions.

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SUSAN J. BALLIET: I would accept "the IV Team" as an answer to that.

PHILIP PARKER: That, that, that should do.
SUSAN J. BALLIET: And who oversaw the IV team when it mixed
the drugs for Harper's execution?
PHILIP PARKER: That would have been the Deputy Warden, and
I believe the Deputy Commissioner.
SUSAN J. BALLIET: And are, are you sure of that? If they
deny that they watched the mixing of the chemicals, what would
you say?
PHILIP PARKER: I'd just say that's what I think, that's
what I recall.
SUSAN J. BALLIET: Was that written into the protocol at
all?
PHILIP PARKER: The best I can remember, it was.
SUSAN J. BALLIET: Did you personally see the drugs mixed?
PHILIP PARKER: No, I didn't.
SUSAN J. BALLIET: When was the new Death House constructed?
PHILIP PARKER: Well, when was it finished, or – I, really,
I couldn't remember the days when it started and finished. It
was, it was, it was after the Harper execution.
SUSAN J. BALLIET: Was that your project? Were you –
PHILIP PARKER: Yes, it was.
SUSAN J. BALLIET: All right. I'd like to

have this – with
25 permission, I'd like to have this marked as Plaintiffs' 4. It's
26 a diagram of the Execution – the new Execution Building.

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1 JUDGE ROGER CRITTENDEN: All right. Thank you.
2 SUSAN J. BALLIET: For you, copy for you. If you would look
3 at that for a moment so that you can tell us if that is the
4 Execution Building that you oversaw.
5 PHILIP PARKER: That looks like the floor plan, uh-huh
6 [yes].
7 SUSAN J. BALLIET: All right. Um, you know, what I really
8 need you to do is show us just a little bit about this, and I
9 think I can do this in 10 minutes or less.
10 JUDGE ROGER CRITTENDEN: Well, I think we're going to have
11 to take a recess now, because we've got to move out of here
12 because –
13 SUSAN J. BALLIET: Oh, all right.
14 JUDGE ROGER CRITTENDEN: – of the, of the District Court's
15 (inaudible).
16 SUSAN J. BALLIET: Not a good time for equipment?

JUDGE ROGER CRITTENDEN: Uh, no, it's not a good time for equipment because you're going to have to take it back down again anyway. We're going to – we're going to recess until 1:30. I don't think the Warden's going to be that much longer. You can call the other witness as soon as the Warden is all finished. All right?

JEFF MIDDENDORF: Yes, Your Honor.

JUDGE ROGER CRITTENDEN: We're going to be in recess. Thank you.

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April 18, 2005, 1:46 p.m.Videotape #4 at 0:00:19

JUDGE ROGER CRITTENDEN: Go ahead, please.

SUSAN J. BALLIET: Thank you, Your Honor. Mr. Parker, I, I brought your exhibits back, and I'm asking you to look now at, uh, what's been marked as #4. That's the Execution Building.

PHILIP PARKER: Okay.

SUSAN J. BALLIET: Um, if you look at that picture, it appears that the Execution Chamber is pretty much in the middle

of the building, and it looks like it's open to Witness Rooms and the Control Room.

JUDGE ROGER CRITTENDEN: Let, let me just interrupt for one second. Uh, I understand – is, is it not broadcasting in the back at all?

VOICES: No. No. No. Not at all.

JUDGE ROGER CRITTENDEN: Well, we're supposed to have a speaker system working some way.

SUSAN J. BALLIET: I can talk louder.

JUDGE ROGER CRITTENDEN: No one can figure out how. Uh, I don't know. It doesn't show up as mute up here or anything.

(Inaudible/mixed and muffled voices)

JUDGE ROGER CRITTENDEN: Can you just speak up?

SUSAN J. BALLIET: I will speak up.

JUDGE ROGER CRITTENDEN: Thank you.

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SUSAN J. BALLIET: Um, it's Plaintiffs' Exhibit 4, and I say it looks like the Execution Chamber is open to the Witness Rooms and the Control Room. Is that the way it is?

PHILIP PARKER: Well, except there's glass separating the rooms.

SUSAN J. BALLIET: Is there, uh, glass

between the Execution
Chamber and the Control Room?
PHILIP PARKER: Yes, there is. Uh-huh [yes].
SUSAN J. BALLIET: And between each of the Witness Rooms in
the Execution –
PHILIP PARKER: Well, from the – from Witness Room to the
Execution Chamber, there's a glass partition.
SUSAN J. BALLIET: So would you say that the Execution
Chamber is entirely surrounded by four walls of glass?
PHILIP PARKER: Uh, you know, the – for the most part, yeah.
SUSAN J. BALLIET: Oh, and what part isn't?
PHILIP PARKER: Well, I, it's been awhile since I've been
in there, but, but each of the – each of the rooms facing the
Execution Chamber has a glass. Now there may be a partition that
comes up a few feet or something, but for the most part, it's
glass.
SUSAN J. BALLIET: Um, is all of that glass, uh, one-way
glass so that you can only see through it one way, or is some of
it clear?
PHILIP PARKER: Um, some of it's clear, I believe.
SUSAN J. BALLIET: Which, which would be

clear?

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PHILIP PARKER: The best I recall, the, the one marked "Witness Room," where the media would be, is – best I recall, it's clear. But, it, it's been awhile since I've been in this building.

SUSAN J. BALLIET: I understand. Would that be the only room that had clear glass?

PHILIP PARKER: That's the only one I remember.

SUSAN J. BALLIET: That, that's good. Uh, where is the prisoner during the execution?

PHILIP PARKER: He's in the Execution Chamber.

SUSAN J. BALLIET: Okay. And who is in there with him?

PHILIP PARKER: Well, I, I can only tell you under our past policy or procedures when I was working.

SUSAN J. BALLIET: That's fine.

PHILIP PARKER: It would be the Warden and Deputy Warden for Security.

SUSAN J. BALLIET: And who is in the Control Room?

PHILIP PARKER: That would be the executioners and, uh,

someone monitoring the heart monitor.
SUSAN J. BALLIET: How many people would that be in the
Control Room?
PHILIP PARKER: At least two. Possibly, there would prob- –
there would be three, at the minimum.
SUSAN J. BALLIET: Okay. Uh, does one of the IV Team
members monitor the heart monitor?
PHILIP PARKER: As best I recall, that's correct, yes.

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SUSAN J. BALLIET: What's the purpose of monitoring the
heart monitor?
PHILIP PARKER: To create a record, and to monitor the, uh,
person being executed, and it would be used to determine death.
SUSAN J. BALLIET: I'm – with the Court's permission, I'm
making this as Plaintiff's #5.
JUDGE ROGER CRITTENDEN: All right.
SUSAN J. BALLIET: And I'm going to give Mr. Parker a copy
of it. If you can just look at that for a moment and see if you
can identify that for us.
PHILIP PARKER: All right, this appears to be the ex- – the,
uh, EKG tape from the execution of Eddie

Harper.
SUSAN J. BALLIET: Okay, thank you. And you said the
monitor, um, that creates this document is located in the Control
Room, is that right?
PHILIP PARKER: Well, you, you have to understand, we never
used this Control Room. I can only tell you from – I don't know
how it would be used now, but –
SUSAN J. BALLIET: I see.
PHILIP PARKER: – you know, this, this room hasn't been used
yet, so.
SUSAN J. BALLIET: Where was it at the Eddie Harper
execution?
PHILIP PARKER: Well, it would have been in a similar place.
SUSAN J. BALLIET: Uh-huh [yes].

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PHILIP PARKER: It would have been in, in the, uh, we didn't
call it the "Control Room," but it was where the executioner was
stationed.
SUSAN J. BALLIET: Okay.
PHILIP PARKER: Yes, same place.
SUSAN J. BALLIET: Is there, um, do any of these glass
windows have curtains that can be drawn over

them?
PHILIP PARKER: Curtains? Yes.
SUSAN J. BALLIET: Can you tell us –
PHILIP PARKER: Yes.
SUSAN J. BALLIET: – which one?
JUDGE ROGER CRITTENDEN: Let me ask, before we go into this,
this – Mr. Parker is not the Warden there now, right?
PHILIP PARKER: That's correct, sir.
JUDGE ROGER CRITTENDEN: Is, is the Warden going to testify
that there's now as to what this building is? I mean, I don't
see any sense in asking Mr. Parker about what it is if we're
going to ask somebody else what it is, because Mr. Parker hasn't
been at the institution for awhile.
SUSAN J. BALLIET: Uh, I can hold these questions for Warden
(inaudible) if you –
JUDGE ROGER CRITTENDEN: Well, I suspect you're going to ask
him again anyway so, you know, because Warden Parker doesn't, uh,
hasn't been there for a while, so let's just wait and ask the
Warden on those.

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SUSAN J. BALLIET: Okay. I'll ask him some questions about

the Eddie Harper execution.
JUDGE ROGER CRITTENDEN: All right.
SUSAN J. BALLIET: Where was the IV Team during the Eddie
Harper execution?
PHILIP PARKER: At what, uh, I mean, you didn't, I, I don't
know at what point you're referring to. During the execution or
before or?
SUSAN J. BALLIET: During the actual execution.
PHILIP PARKER: They would be just outside the Execution
Chambers. Uh, they had other assignments, uh. As I recall, one
would be monitoring the heart monitor. Um, now I wasn't out
there. I was in the Execution Chamber itself, but they were
standing by, to best of my knowledge, outside the chambers.
SUSAN J. BALLIET: Um, were there tubes that went from the
executioner, where the executioner was, to the inmate?
PHILIP PARKER: Yes, that's true.
SUSAN J. BALLIET: And could you describe those?
PHILIP PARKER: The tubes?
SUSAN J. BALLIET: Was there one tube, or two?
PHILIP PARKER: There were two tubes.
SUSAN J. BALLIET: And they went from the

executioner, where
23 they were positioned outside the execution area and into – well,
24 you describe it, sir.
25 PHILIP PARKER: Behind a, a door, which had a one-way glass,
26 the executioner was stationed with the syringes, with the, uh,

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1 lethal injections. There were, as you say, two tubes that went
2 through a small portal in the door, and they were attached to
3 IVs, uh, to the person being executed, to Eddie Harper.
4 SUSAN J. BALLIET: How long were those tubes from where the
5 executioner inserted the, the chemicals to the inmate?
6 PHILIP PARKER: The distance? Oh, probably three or four
7 feet.
8 SUSAN J. BALLIET: And where were you standing during the
9 execution?
10 PHILIP PARKER: I positioned myself, uh, at the front of the
11 gurney, or in other words, next to his head, where his head, he
12 was laying down on the gurney, and I was standing right next to
13 his head facing the audience.

SUSAN J. BALLIET: Could you see the IV Team from where you were?
PHILIP PARKER: No, I could not.
SUSAN J. BALLIET: Was anyone, um, any of the Wardens in a position to watch what they were doing?
PHILIP PARKER: During the execution?
SUSAN J. BALLIET: During the execution.
PHILIP PARKER: Well, the, the Deputy Wardens, no, I don't think so.
SUSAN J. BALLIET: Some other type of Warden?
PHILIP PARKER: Well, there's only one Warden.
SUSAN J. BALLIET: Okay.
PHILIP PARKER: And there's three Deputy Wardens.

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SUSAN J. BALLIET: Okay. Well, would some other prison personnel, besides a Warden, be watching the IV Team?
PHILIP PARKER: You're referring to during the ex- –
SUSAN J. BALLIET: During the actual execution.
PHILIP PARKER: – execution. I don't think so. Not that I know of.
SUSAN J. BALLIET: Who – I'm sorry?

PHILIP PARKER: Not that I know of.
SUSAN J. BALLIET: Okay. Um, and who would watch – well, the, who mixed the chemicals?
PHILIP PARKER: If I recall, the IV Team, a member of the IV Team, or maybe more than one, well there was. There was several members of the IV Team or maybe the entire IV Team, but, uh, and it was supervised by a Deputy Warden and a Deputy Commissioner.
SUSAN J. BALLIET: And if they said that they didn't watch the mixing of the chemicals, would you disagree with that?
PHILIP PARKER: Well, I can't verify that. I know that that was the way we had planned it. And as far as I know, I never heard any different, that's the way it went. That I, as far as I know.
SUSAN J. BALLIET: How far away from Harper were you when he died?
PHILIP PARKER: An inch – just inches. I was right at his head.

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SUSAN J. BALLIET: Who else was there in

the room with you
and Mr. Harper?
PHILIP PARKER: Uh, Deputy Warden Bill Henderson.
SUSAN J. BALLIET: Can you tell us what you observed?
PHILIP PARKER: I basically had a view of the audience, the
media, uh, the witnesses. Of course, I could see my Deputy
Warden in the room. Um, and, and my – I couldn't directly
see, uh, Eddie Harper's face and head. I could see it in my
peripheral view. Uh, I could see his lower, lower tor- – torso,
in other words, from his waist down, better than I could see his
upper body. And it was just total silence and, and tried not to
stare at anyone in the, in the Witness Room, but, but just, aware
of everything going on. And that's – there wasn't much else to
see, really.
SUSAN J. BALLIET: Where was the Deputy Warden standing in
relation to Eddie Harper?
PHILIP PARKER: I – the best I recall, he was directly
across from me. Uh, but he was standing in such a way that he
would not block the view of the witnesses, which would have mean

he would have been, uh, between the door and the window, and I know that's hard for you to relate if you're not familiar with it, but, but out of the way of the witnesses where they could see, but near the exit door, and where he was facing, uh, facing Eddie Harper.

SUSAN J. BALLIET: Could Mr. Harper have shed a tear and you wouldn't have seen it?

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PHILIP PARKER: If he had, I would not have seen it, because I only had his face in my peripheral view.

SUSAN J. BALLIET: Uh, have you heard of "conscious paralysis"?

PHILIP PARKER: Not specifically.

SUSAN J. BALLIET: Are you – you, you haven't to this day?

PHILIP PARKER: No.

SUSAN J. BALLIET: Um, are you aware that someone who has taken a paralytic drug could be paralyzed and not able to exhibit pain?

PHILIP PARKER: And still be conscious?

SUSAN J. BALLIET: During a surgical procedure, yes.

PHILIP PARKER: No, that's – I don't know of

that. I have
no knowledge of that.
SUSAN J. BALLIET: Okay. So I guess – well, uh, were any
steps taken to prevent or discover whether or not this was
happening with Eddie Harper?
PHILIP PARKER: No. This is the first I've heard of that.
SUSAN J. BALLIET: Did you, uh, notice Eddie Harper – uh,
did he have any appreciable change in color during the execution?
PHILIP PARKER: I did not see any change in color.
SUSAN J. BALLIET: Uh, do you recall your deposition?
PHILIP PARKER: Yes, I do. I don't believe I answered that
he had a change in color.
SUSAN J. BALLIET: Well, let me look. I think – (paper
handling sounds). Did anyone monitor his blood pressure?

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PHILIP PARKER: No.
SUSAN J. BALLIET: Did you have a, a B-I-S machine, that's
"B" like baby, I-S? Do you know what one is?
PHILIP PARKER: No, ma'am, I don't.
JEFF MIDDENDORF: She needs to explain what that is. If she

can give us what exactly it is, other than BIS?
JUDGE ROGER CRITTENDEN: Okay.
SUSAN J. BALLIET: Well, it was identified to me as a BIS
machine. It's a special machine that is designed to monitor
consciousness during surgery.
JEFF MIDDENDORF: Was that in a deposition or are you –
SUSAN J. BALLIET: I'm trying to ask questions outside the
depositions.
JUDGE ROGER CRITTENDEN: Okay, go ahead.
(Inaudible/mixed voices)
JUDGE ROGER CRITTENDEN: Explain what the – explain what the
machine is and then ask him if he had – if they had one.
SUSAN J. BALLIET: A BIS machine is a machine used in
surgery, uh, to monitor whether or not someone is conscious, or
what level of sedation the person has attained.
PHILIP PARKER: No, we just had a heart monitor.
SUSAN J. BALLIET: Are you, uh, aware of potential problems
with lethal injection?
PHILIP PARKER: Yes.
SUSAN J. BALLIET: Could you tell us what those are, the
ones you were aware of at the time of Eddie Harper's execution?

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PHILIP PARKER: Well, I'm trying to think because, uh, the – some of the problems would be – could be – a failure to find an IV site, a suitable IV site. Uh, one of the other potential problems we tried to plan for was after injections had started and the IV failing for what we would call, just in common language, a "blowout" or, or a catheter failed or come out, by, by, pushing or injecting too vigorously or too hard, so we tried to train and plan for that. But, uh, those are two that come to top of my mind. Uh, uh, there are perhaps others, but I'm just not – they're just not coming to my mind now.

SUSAN J. BALLIET: Do you recall that you were aware of the problems that might be related to drug users?

PHILIP PARKER: Oh, yes. There's, we, some drug users may have scar tissue over the most obvious veins that you'd want to use in a, in an execution. And that would create a problem for us if, if, if a drug user – if there was a lot of scar tissue and we had difficulty starting an IV, it could

cause a problem.
SUSAN J. BALLIET: Uh, were you aware of any problems
regarding the size of veins or the location of veins in the body?
PHILIP PARKER: Well, in our practices, there were many,
numerous practices, we did have trouble at times. Or I say
"trouble," we had – we – what I'd, what I'd consider normal
issues in finding veins on some subjects. And fortunately for
us, we, we were able to practice with a variety of subjects and,
and, uh, we planned for that and we, we, we did occasionally have
trouble starting an IV on, on ourselves, basically.

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SUSAN J. BALLIET: Would the – would nervousness on the part
of the, the subject make a difference in siting an IV?
PHILIP PARKER: It was my understanding, from the advice I
got from other Wardens that do this that, yes, nervousness could
affect the, the subject, the person that we're, that we're
executing. It could.
SUSAN J. BALLIET: Were you aware of

problems, uh, related
to the possibility the inmate might vomit?
PHILIP PARKER: Yes, we were. Matter of fact, I've seen
that during an execution. So, yes.
SUSAN J. BALLIET: Um, could there be problems related to
the manner in which the executioner performs the execution?
PHILIP PARKER: I'm not quite sure I understand –
JEFF MIDDENDORF: Your Honor, I'm –
(Inaudible/mixed voices)
JUDGE ROGER CRITTENDEN: I'm going to – I'm going to sustain
the objection, and let's – let's get specific about what we're
talking about.
JEFF MIDDENDORF: Okay.
SUSAN J. BALLIET: What would happen if the executioner
pushed too hard on the syringes?
JEFF MIDDENDORF: Asked and answered. I object.
SUSAN J. BALLIET: First time I've asked it, Your Honor.
JUDGE ROGER CRITTENDEN: Go ahead and ask. I think he
talked – that was the blowout?
JEFF MIDDENDORF: Yes.

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(Inaudible/mixed voices)

PHILIP PARKER: Yes, sir. That could be a problem.
JUDGE ROGER CRITTENDEN: Okay.
SUSAN J. BALLIET: Um, what about problems regarding the staff that are assigned to do the tasks? Could problems arise with, with your, with your own staff?
PHILIP PARKER: Absolutely. Uh, the Warden could faint or have a heart attack and, uh, so could the executioner or any, any other member of the team. So we had redundant – we had someone to take each of our places during an execution (inaudible).
SUSAN J. BALLIET: Would it be a problem if a volunteer decided that he wanted to stop the execution?
PHILIP PARKER: Would it be a problem?
SUSAN J. BALLIET: Yes.
PHILIP PARKER: We had planned for that. And we had, as far as I know, those bases covered. We had in plan – a plan for a volunteer, if he – he had the ability to stop the execution.
SUSAN J. BALLIET: Uh, what equipment did you have for that contingency?
JUDGE ROGER CRITTENDEN: I'm going to sustain for the security of the institution.
SUSAN J. BALLIET: Were you involved in

getting lethal
23 injection adopted as a method of execution?
24 PHILIP PARKER: No, I was not involved.
25 SUSAN J. BALLIET: Did you witness lethal injection in any
26 other state?

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1 PHILIP PARKER: Yes, I did.
2 SUSAN J. BALLIET: Where?
3 PHILIP PARKER: Indiana.
4 SUSAN J. BALLIET: Any other states?
5 PHILIP PARKER: Not, not lethal injection.
6 SUSAN J. BALLIET: In preparing for lethal injection in
7 Kentucky, did you review materials from other states?
8 PHILIP PARKER: Yes, I did.
9 SUSAN J. BALLIET: And what states, do you recall?
10 JEFF MIDDENDORF: Judge, we're going to object to this.
11 This, once again, it's been covered in depositions. We're
12 starting to, to rehash things we've already spoken about. And
13 we've already agreed that this was going to be limited to just –
14 JUDGE ROGER CRITTENDEN: Is this covered in the deposition?
15 JEFF MIDDENDORF: This is covered.
16 SUSAN J. BALLIET: Uh, my next question is not –

JUDGE ROGER CRITTENDEN: All right.
SUSAN J. BALLIET: – and it's related to the one that –
JUDGE ROGER CRITTENDEN: Okay.
SUSAN J. BALLIET: In your deposition, you said that you looked at Virginia, Indiana, Ohio, Georgia, Alabama, Texas, Florida, some New England states, and New Jersey. Does that sounds (inaudible)?
PHILIP PARKER: I don't remember New Jersey.
SUSAN J. BALLIET: Okay, well, except New Jersey, you remember.

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PHILIP PARKER: I said – I think I said there was some New England state and I couldn't remember which New England state it was.
SUSAN J. BALLIET: And what year did you look at these materials? When did ·
PHILIP PARKER: Oh, over a, well, I probably started looking at them when I was Deputy Director in Ohio, uh, over a probably 12-year time period.
SUSAN J. BALLIET: Would you have – would your review of

these materials have ended with the 1998-1999 protocol, when you completed that?

PHILIP PARKER: Uh, I don't recall looking at other states' materials after 1999.

SUSAN J. BALLIET: Uh, were you aware that Georgia adopted – didn't adopt lethal injection until 2001?

PHILIP PARKER: No, I don't – I don't know when they did.

SUSAN J. BALLIET: And were you aware that Alabama didn't adopt it until 2002?

JEFF MIDDENDORF: Your Honor, I object to counsel testifying.

JUDGE ROGER CRITTENDEN: Well –

JEFF MIDDENDORF: This is direct examination.

JUDGE ROGER CRITTENDEN: Well, I, I – let's – I, I understand the – the need to, to determine the adoption of a protocol, but I'm going to keep us back on track. We're talking about the protocol and the efficacy of the drugs and the

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efficiency or the ability to carry out that, that process. And to that extent, not everything that went into

making the decision
of how it takes place is relevant to what, what we're taking care
of today.
SUSAN J. BALLIET: I only have about four or five more
questions.
JUDGE ROGER CRITTENDEN: All right. Uh, let's go.
SUSAN J. BALLIET: All right. Uh, did you review the
chemicals that the other states used?
PHILIP PARKER: Uh, yes, I did.
SUSAN J. BALLIET: Are they same as Kentucky uses?
PHILIP PARKER: As best I recall, they're – all the states
that I remember looking at were the same, as best I recall.
SUSAN J. BALLIET: Did you write – did you write the policy
naming the three drugs that Kentucky uses?
PHILIP PARKER: Yes, I did.
SUSAN J. BALLIET: Do you recall what the drugs are?
PHILIP PARKER: I barely recall the, the, uh, blood pressure
medicine I take. I mean, I, I could probably make a stab at it,
but it's been – I tried to forget it, to be honest with you.
SUSAN J. BALLIET: Uh, were any medical experts consulted
regarding which chemicals to choose?

PHILIP PARKER: Medical experts? To – before we chose them?
SUSAN J. BALLIET: Right.
PHILIP PARKER: No. To the best of my recollection, we went
by what other states had successfully used.

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SUSAN J. BALLIET: And – so why did you choose those three
drugs?
PHILIP PARKER: Because they had been used successfully in
Texas and the, the other – some of the other states we looked at.
SUSAN J. BALLIET: Thank you.
JUDGE ROGER CRITTENDEN: Thank you, Ms. Balliet. Who's
doing the cross (inaudible)? Mr. Middendorf, they're pointed at
you.
JEFF MIDDENDORF: Judge, we have no questions for Warden
Parker.
JUDGE ROGER CRITTENDEN: All right. Thank you, Warden
Parker. Oh, let me ask – let me ask one thing. I take it from
your last answer is that you went to other states and you used
basically the protocols and the drugs – not the protocols, but
the drugs that other states had used. Did you

go to University
16 of Kentucky, University of Louisville, get an anesthesiologist or
17 anybody in to consult with your staff?
18 PHILIP PARKER: No, sir. And, and, and, you know, part of
19 the confusion on one of the answers I had was when, when – during
20 that 12-year period when I was Warden in, in those states, we
21 were looking at other states, but some states – I mean, all that
22 runs together because some states were still doing both,
23 electrocution and injection, as Kentucky does now. So we had to
24 be prepared for both, and we still do.
25 JUDGE ROGER CRITTENDEN: Okay.

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1 PHILIP PARKER: So, but, but, uh, what we did was, as far as
2 the chemicals, were, were adopted from states who were doing this
3 routinely. That's what they were doing, and, and I didn't have
4 any reason to question that.
5 JUDGE ROGER CRITTENDEN: Okay.
6 PHILIP PARKER: And I didn't have the knowledge to question,
7 but no reason to, because they were doing it, uh, on a regular
8 basis.

JUDGE ROGER CRITTENDEN: And I take it no one from the Justice Cabinet or the Corrections Department as such said any differently to you. You were basically the one in charge of developing policy.

PHILIP PARKER: Yeah, it was, it was pretty much left up to me to come up with this checklist, and it was reviewed. You know, this thing was looked at by – from the Secretary of Justice, even in the Governor's office. I mean it was looked at at the highest levels of, of a state government.

JUDGE ROGER CRITTENDEN: Okay.

PHILIP PARKER: And, and it was gone over with a fine-tooth comb many, many, many times before we ever put it into place.

JUDGE ROGER CRITTENDEN: (Inaudible)

PHILIP PARKER: So, if, if there'd been a dispute about that – as, as far as I recall, everybody that looked at it, the, the am- – the chemicals and the amounts were not questioned.

JUDGE ROGER CRITTENDEN: Okay.

PHILIP PARKER: As far as I know.

JUDGE ROGER CRITTENDEN: Okay.
JEFF MIDDENDORF: Maybe just a couple questions.
JUDGE ROGER CRITTENDEN: That's what I was afraid of,
Mr. Middendorf.
JEFF MIDDENDORF: I prom· – and I promise there are only a
couple.
JUDGE ROGER CRITTENDEN: All right.
JEFF MIDDENDORF: When Ms. Balliet asked you about Georgia
and not – them not adopting lethal injection until 2001, did they
already have electrocution at that time?
PHILIP PARKER: Well, they were doing electrocution and, and
that's what I'm saying. All this runs together. When we looked
at a state, "Hey, what are you –" – you know, we looked at all of
it. And –
JEFF MIDDENDORF: Well, would it be fair to say when you
traveled to those other states, even if they didn't have lethal
injection at that time, that they already had at least an, an
electrocution protocol –
PHILIP PARKER: Oh, yes.
JEFF MIDDENDORF: – and you would pull things out of that as
well?
PHILIP PARKER: We were looking at the

what do you do
23 leading up to, the security aspects of it, and a lot of aspects.
24 And some of them were preparing – their laws – a lot of the
25 states, their laws were changing. We were all – several of us
26 were trying to get ready at the same time. And so, so we were

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1 creating a network of – you know, we'd talk to each other. And
2 that's – that's part of the benefits of going to some of this
3 training we went to, because I knew the Warden at different
4 facilities and, and I could pick up the phone and say, "Hey, what
5 are you doing about this?" And, and if there was problems or
6 issues, uh, we could talk to each other. And sometimes we did.
7 JEFF MIDDENDORF: That's all the questions I have, Judge.
8 JUDGE ROGER CRITTENDEN: Anything?
9 THEODORE S. SHOUSE: No, sir.
10 SUSAN J. BALLIET: No, thank you.
11 JUDGE ROGER CRITTENDEN: Thank you, Mr. Parker. You can
12 step down; you're excused.
13 PHILIP PARKER: Thank you.
14 JUDGE ROGER CRITTENDEN: Thank you.

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DR. TRACEY COREY: I drew it from three sites. I drew it from, specifically as noted on page 6 of the Autopsy Report, I drew it from the heart. I took it also from the vena cava; the vena cava is the big vein that brings blood from the legs back to the heart. So the blood that's in the vena cava has already gone all the way down to the lower extremities and then it's on its way back up to the heart, to go back out to the lungs. And then I also drew it from the right axillary vein. The axillary vein is the vein that runs through your armpit region, so it's coming back from the arm.

DAVID M. BARRON: What is peripheral blood?

DR. TRACEY COREY: Peripheral blood is blood from, uh, diff- – from a source other than the heart, is the easiest way to define it by most people.

DAVID M. BARRON: Why did you draw it from peripheral blood locations and the heart?

DR. TRACEY COREY: To verify my results.

Uh, basically, in
most instances, in a lot of toxicology, uh, references, they will
indicate that, uh, blood should be drawn from the peripheral site
if available. The problem is, in forensic pathology, sometimes
peripheral blood is not available because the person has bled too
much. But if peripheral blood is available, it is considered the
best site, uh, to test for in postmortem specimens.
DAVID M. BARRON: So to a reasonable degree of medical
certainty, do you believe that peripheral blood is the most
reliable indicator of the presence of drugs in the body?

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DR. TRACEY COREY: I can't answer that yes or – uh, yes or
no.
DAVID M. BARRON: You just stated that your preference for
postmortem blood drawing would be from peripheral sites.
DR. TRACEY COREY: Yes, sir.
DAVID M. BARRON: So, would that make it more reliable than
a heart location?
DR. TRACEY COREY: It would depend on the

particular case
and the particular substance. In general – we, and some blood,
some, some drugs, are stored, for instance, in fat. Uh, you
know, the, the products produced by marijuana are stored large- –
largely in fat. And so I, I can't make a blanket statement that
peripheral blood is always going to be the most reliable source.
It's going to depend on your particular case. In general, what
we're trained to do, is if it's available, we take the peripheral
blood.
DAVID M. BARRON: So when you drew the blood for Harper, you
took peripheral blood because you thought that would be a
reliable location?
DR. TRACEY COREY: I thought it would be a reliable
location, and I wanted to be able to compare that also to the
level in the heart. I wanted to make sure that I adequately
sampled as many sites as I could, so – or as many sites as I
thought was, was necessary, so that people could look at the
results at a later time and, uh, be able to, to decide for
themselves, um, what the levels might mean.

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DAVID M. BARRON: Thank you. We have no further questions at this time.

JUDGE ROGER CRITTENDEN: Thank you. Mr. Middendorf?

JEFF MIDDENDORF: Good afternoon, doctor.

DR. TRACEY COREY: Good afternoon.

JEFF MIDDENDORF: Um, now as you previously testified, you, of course, did the autopsy for Eddie Lee Harper, correct?

DR. TRACEY COREY: Yes, sir.

JEFF MIDDENDORF: Okay. And you did a complete exam of Eddie Lee Harper, is that a fair statement?

DR. TRACEY COREY: Yes, sir.

JEFF MIDDENDORF: Um, did you examine the IV sites on Mr. Harper?

DR. TRACEY COREY: Yes, sir.

JEFF MIDDENDORF: Uh, did you observe any signs of infiltration?

DR. TRACEY COREY: I did not. I would have noted those in my report had I observed those.

JEFF MIDDENDORF: Can you please explain to the court what "infiltration" is?

DR. TRACEY COREY: Most of us who have

been in the hospital
22 and have had to have an IV may, may have had an infiltration.
23 Basically, it's easiest, it's – the easiest way to describe it is
24 if the needle comes out of the vein and so then fluid is still
25 going into the body, but it's not going into the vein anymore, so

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1 it, it, it infuses the surrounding tissue. And so often you'll
2 get a site of swelling in that area.
3 JEFF MIDDENDORF: Look like a bruise?
4 DR. TRACEY COREY: Well, it's not a bruise because it's the
5 fluid that's coming down through the IV. Uh, and so what you see
6 is mainly just swelling rather than, than a bruise. Now you can
7 get a bruise associated with it if the vein keeps leaking.
8 JEFF MIDDENDORF: Okay. Does that indicate to you that an
9 IV would have been in the vein properly?
10 DR. TRACEY COREY: I found no evidence that the IV wasn't in
11 the vein.
12 JEFF MIDDENDORF: Okay.
13 DR. TRACEY COREY: That'd be the best way to say that.
14 JEFF MIDDENDORF: Um, and were you

provided with historical
15 information with regard to Mr. Harper's execution?
16 DR. TRACEY COREY: I was provided with some historical
17 information.
18 JEFF MIDDENDORF: Okay, and why is it important to, to go
19 back and find historical – or, I guess before you do the autopsy,
20 gain historical information in making your findings?
21 DR. TRACEY COREY: Well, basically, we want to get as much
22 historical information at the beginning as we can. Um, the
23 practice of medicine is based on the performance of a history and
24 physical. Uh, my patients, of course, are usually – not always,
25 but usually deceased, and so my physical examination is going to
26 be the autopsy. But we still always take a history. Uh, the,

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1 the analogy I always give is, you know, you don't go to your
2 family physician and get up on the examination table and say,
3 "Guess what's wrong with me?" You provide your physician with
4 a history so that he can tailor his examination

based on, on
what's wrong. In this particular case, the history coming in,
of course, was that this was a judicial execution by lethal
injection, and therefore the toxicology was going to be the most
important to me, and that's why I did the different sampling that
I would not have normally done.
JEFF MIDDENDORF: And did you rec- – well, what of history
did you receive?
DR. TRACEY COREY: I received – I received the history that
this was a judicial execution by lethal injection. I was told of
the, uh, quantities of the drugs and the drugs that he would be
receiving. And then when, um, the body was, um, transported to,
to the office of the Medical Examiner, um, I was told that it was
a judicial execution, and I was not told that anything unusual
had occurred in their procedure, I guess is the easiest way to
say it.
JEFF MIDDENDORF: Okay. And you said that you were able to,
to take blood from different sites. Um, what does that tell you
when you're able to take blood from, from different sites of the

body?
DR. TRACEY COREY: Well, the, the different – I did the
different sites in this case, as I said, to verify the different
levels of the different drugs.

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JEFF MIDDENDORF: And does that indicate that the – that the
drugs circulated throughout the body?
DR. TRACEY COREY: Yes, sir. For me, the, the presence of
having the, uh, the thiopental and the pancuronium in both the
vena cava – in all three, the vena cava, the heart, and the right
axillary vein, indicated to me that the drugs had gone both above
and below the diaphragm, as we say, because the diaphragm is your
big breathing muscle. So we kind of arbitrarily separate the
body into the upper half and the lower half using the diaphragm.
The vena cava is below the diaphragm. That showed me that the
blood – the drugs had circulated, had gone down to the lower
extremities and were on their way back up.
JEFF MIDDENDORF: Do you want to get a drink real quick,
Doctor?

DR. TRACEY COREY: Yes, sir. You can go ahead.
JEFF MIDDENDORF: Okay.
JUDGE ROGER CRITTENDEN: You can talk to him, too. I can see you in the monitor, so you don't have to turn around.
JEFF MIDDENDORF: Uh, are you aware of what time Mr. Harper was executed?
DR. TRACEY COREY: I believe on the Coroner's sheet – let me find it in all this paperwork. I believe it was 7:28 p.m.
JEFF MIDDENDORF: Okay.
DR. TRACEY COREY: I believe.
JEFF MIDDENDORF: And what time did, did you perform the autopsy?

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DR. TRACEY COREY: 9:40 a.m. the following day.
JEFF MIDDENDORF: So some 14 hours later?
DR. TRACEY COREY: Yes, sir.
JEFF MIDDENDORF: Can you tell the court about postmortem redistribution of blood?
DR. TRACEY COREY: Some drugs, uh, may exhibit postmortem redistribution, in that the levels that we find at autopsy, uh,

may not be the exact levels in the – in the bloodstream in that location at the time of death. Um, that is a common phenomenon and that's one thing that forensic pathologists always have to take into account whenever we're trying to interpret toxicology results.

JEFF MIDDENDORF: Okay. Your Honor, I would like to mark this Com- – or I'm used to saying "Commonwealth," I apologize, but Defendants' Exhibit 1.

JUDGE ROGER CRITTENDEN: It can be the Commonwealth's (inaudible).

DAVID M. BARRON: I'm going to object at the moment. May we approach please?

JUDGE ROGER CRITTENDEN: Uh, yes, you may. Or you can argue from there. There's not a jury that's going to be prejudiced.

(Inaudible/mixed voices)

DAVID M. BARRON: This article deals with specific chemicals that are used in lethal injection. It was not, to my knowledge here, written by Dr. Corey, and she's not an expert at all in pharmacology, postmortem redistribution, or pharmacokinetics.

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They are bringing in their own experts to talk specifically on that topic. She had been questioned during depositions, and has already stated that she has no basis for any testimony here beyond that of an average layperson or medical examiner. And it goes well beyond the scope of the direct examination questions.

JUDGE ROGER CRITTENDEN: (Inaudible) here, so it doesn't really (inaudible). Go ahead.

JEFF MIDDENDORF: Well, this was in the *American Academy of Forensic Sciences*. Um, Dr. Corey can certainly testify – these are actually two case studies from an execution in Oregon.

JUDGE ROGER CRITTENDEN: Okay.

JEFF MIDDENDORF: And the thiopental levels at the, at the blood taken at the time of the execution, and then also at autopsy. So she can certainly testify as to the results that you can find in forensic science.

THEODORE S. SHOUSE: Judge, she did testify at her deposition. I know we're not supposed to rehash the depositions

here, but that she's not an expert in pharmacology,
pharmacokinetics, anything like that. I think this calls for an
expertise that's beyond her ken.
JUDGE ROGER CRITTENDEN: Well, let's ask her that.
JEFF MIDDENDORF: Okay. I didn't know we – we had qualified
her as an expert, or that under KRE rule we're required to do so
anymore. I thought we changed that.

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JUDGE ROGER CRITTENDEN: Let's, let's get to what the
question is going to be, and then we'll determine what, what the
answers are.
JEFF MIDDENDORF: Yes, sir. Okay now –
JUDGE ROGER CRITTENDEN: Now what is it you want to ask the
doctor about – thank you, sheriff.
JEFF MIDDENDORF: What she believes of the results, so she
can testify as to the results of the levels, how they dropped,
uh, explaining postmortem redistribution and the two case studies
that were out of Oregon on two people that were executed.
JUDGE ROGER CRITTENDEN: Okay, yeah. Doctor, are you

familiar with those studies?
DR. TRACEY COREY: Yeah, I'm familiar with the, with the
data that was presented in the abstract.
JUDGE ROGER CRITTENDEN: Are you familiar with the process
or familiar with the basis for coming to whatever conclusions
that – did, did you reach any conclusions on this at the
deposition, or were you asked about it at the deposition?
DR. TRACEY COREY: On this particular paper?
JUDGE ROGER CRITTENDEN: Yes, right.
DR. TRACEY COREY: No. But, but I did basically, when I got
my levels, I looked at this paper to see, basically at how my
levels compared to the levels presented in the paper.
JUDGE ROGER CRITTENDEN: Go ahead. She can testify about
that. Go ahead. It's another –

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JEFF MIDDENDORF: Can you please explain what this article
talks about here?
DR. TRACEY COREY: Um, this, this was a, a presentation at
the Annual Meeting of the American Academy of Forensic Sciences.

uh, held in February in 1998. And it was presented, uh, two cases of, uh, execution by lethal injection, the toxicology results were, were presented. Uh, what those showed in, in Case 2, uh, under the chart, it showed that the thiopental level at death in the heart blood was 16.7 milligrams per liter, whereas at autopsy, the femoral blood level – and the, the femoral blood is going to be just a little bit below the vena cava site that I drew – the femoral blood level at autopsy was 1.8 milligrams per liter. So there was a drop, basically, of tenfold between the heart blood at death and the femoral blood at autopsy. Um, and the partic- – the author of this paper just stated, quote, "the thiopental concentration in Case 2 femoral blood collected at autopsy is an order of magnitude lower than in the heart blood collected immediately on death. This may be due to rapid distribution of the drug to peripheral tissue and/or to postmortem redistribution."

So I, when I saw my levels, I thought that my levels basically, uh, were pretty close to the levels

that, that the,
23 uh, Oregon toxicologist had reported.
24 JEFF MIDDENDORF: And what were the levels in Mr. Harper's
25 heart?

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1 DR. TRACEY COREY: Now, part of this is, uh, well, the
2 level, uh, in Mr. Harper's –
3 JUDGE ROGER CRITTENDEN: Now this is an autopsy that she's
4 testifying about.
5 JEFF MIDDENDORF: She's talking about Oregon. Now with
6 regard to –
7 JUDGE ROGER CRITTENDEN: Now I understand that, but if, if I
8 understand them, the questioning, there, there was, there was
9 blood drawn in Oregon at, at time of death and then at autopsy.
10 DR. TRACEY COREY: Yes, sir.
11 JUDGE ROGER CRITTENDEN: Okay, and this, and all that, that
12 Dr. Corey is talking about is blood drawn at the time of autopsy,
13 so I hadn't heard anything about any blood being drawn at time of
14 death.
15 DR. TRACEY COREY: That's correct.
16 JUDGE ROGER CRITTENDEN: Okay. All right.

17 DR. TRACEY COREY: Basically, and, and this, this paper is a, is
18 a bit – there, there's, uh, it, it's hard to compare some
19 of the data.
20 JUDGE ROGER CRITTENDEN: Okay.
21 DR. TRACEY COREY: Because they drew the thiopental level at
22 death from the heart, but they didn't draw it from the femoral
23 blood. So I don't know what, what the level –
24 JUDGE ROGER CRITTENDEN: So the femoral was drawn at
25 autopsy, and the heart was drawn at death.
26 DR. TRACEY COREY: Yes, sir.

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1 JUDGE ROGER CRITTENDEN: Okay. And that's, that's
2 Mr. Shouse's objection, that I'm going to, that I'm going to, uh,
3 uh, sustain.
4 DR. TRACEY COREY: So, so, it's, uh, you have to, you know,
5 it's comparing apples to oranges.
6 JUDGE ROGER CRITTENDEN: Correct.
7 DR. TRACEY COREY: Uh, now the level that I found in the –
8 that was reported by the toxicology laboratory from the blood
9 that, that I took from Mr. Harper's heart, showed a thiopental
10 level of 6.5 milligrams per liter.

JUDGE ROGER CRITTENDEN: Okay. And, sorry, it's Mr. Barron's objection, not Mr. Shouse's.

JEFF MIDDENDORF: What is the standard reference that you would use regarding postmortem drug ranges?

DR. TRACEY COREY: In general, the standard reference, uh, chart that we, uh, go to first, that we rely on first, um, in the Medical Examiner's Office, is published by Winek, W-I-N-E-K.

JEFF MIDDENDORF: Okay, and I actually have that here. Uh, do you want to make a copy?

MALE VOICE: If you could please –

JEFF MIDDENDORF: Is that what we're talking about? If we could mark that as Exhibit 3, Your Honor

JUDGE ROGER CRITTENDEN: Yes.

DAVID M. BARRON: No objection.

DR. TRACEY COREY: Yes, sir.

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JEFF MIDDENDORF: Actually, Doctor, (inaudible). And what is the therapeutic range of the sodium thiopental in a postmortem setting?

DR. TRACEY COREY: In, in this particular reference, uh, Winek lists the therapeutic range from postmortem blood for

thiopental as ranging anywhere from one to 42, um, mikes per mill, which is the same thing as our milligrams per liter.

JEFF MIDDENDORF: And, and Mr. Harper was with- – within that range.

DR. TRACEY COREY: Yes, sir.

JEFF MIDDENDORF: And what does "therapeutic" mean?

DR. TRACEY COREY: "Therapeutic" means that the drug is having its desired – it is at, at a level where it's having its desired effect.

JEFF MIDDENDORF: Okay. And sodium thiopental, what is the desired effect of that?

DR. TRACEY COREY: The de- – the desired effect is, uh, unconsciousness.

JEFF MIDDENDORF: Okay. That's all the questions I have.

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SUSAN J. BALLIET: Mr. Rees, could you please state your name for the record and spell your last name?

JOHN REES: John Rees, R-E-E-S.

SUSAN J. BALLIET: How are you currently employed, Mr. Rees?

JOHN REES: I am Commissioner of Corrections for the State

of Kentucky.
SUSAN J. BALLIET: How long have you held that position?
JOHN REES: Uh, since January of last year.
SUSAN J. BALLIET: Have you ever worked with the Oklahoma
Department of Corrections?
JOHN REES: Yes, I have.
SUSAN J. BALLIET: When was that?

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JOHN REES: Um, July of '76, as I recall, to December of
'80.
SUSAN J. BALLIET: What was your position there?
JOHN REES: I started off as Director of Classification, was
subsequently promoted to Assistant Director of Institutions, and
then finally to Deputy Commissioner of Programs and Services.
SUSAN J. BALLIET: When you first began working in Oklahoma,
what was Oklahoma's method of execution?
JOHN REES: Electric chair.
SUSAN J. BALLIET: Did their method of execution change
while you were working at the prison in Oklahoma?
JOHN REES: I did not work at a prison in Oklahoma. I
worked in central office.

SUSAN J. BALLIET: I'm sorry. While you were working at the central office, did the method change?
JOHN REES: As I recall, it, it did.
SUSAN J. BALLIET: And what did it change to?
JOHN REES: Lethal injection.
SUSAN J. BALLIET: What was your participation, if any, in drafting Oklahoma's lethal injection procedures?
JOHN REES: As, and, and whether I was Assistant Director of Institutions or Deputy Director at the time, I don't recall; it was a while ago. I would have been involved in putting together a policy and procedure, uh, to implement that statute.
SUSAN J. BALLIET: What states did you consult with?
JOHN REES: I don't recall.

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SUSAN J. BALLIET: If I could, with the Court's permission mark this as –
JUDGE ROGER CRITTENDEN: Yes.
(Inaudible/muffled voices)
SUSAN J. BALLIET: This is #7. Take some time and look at that.
JEFF MIDDENDORF: Judge, can we take a

second to look at
this?
JUDGE ROGER CRITTENDEN: Sure.
JEFF MIDDENDORF: It's the first time we've seen it.
JUDGE ROGER CRITTENDEN: Okay.
JEFF MIDDENDORF: Thank you.
SUSAN J. BALLIET: When was the last time you looked at
Oklahoma's execution protocol, Mr. Rees?
JOHN REES: I have no idea.
JEFF MIDDENDORF: Your Honor, we're, uh, we're going, we're
going to object to the relevance of this document that we've –
this is from 1978 and it's signed by somebody other than this
witness. And I don't have a hair of a notion what it has to do
with what we're here for today. I object.
SUSAN J. BALLIET: Your Honor, this, uh, this the – as
Professor Denno testified, this is the first lethal injection
protocol. It's very relevant because it was one of the –
JUDGE ROGER CRITTENDEN: She said, the testified that
Oklahoma did the first lethal injection. I'm not, you know,

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I'm not so sure that, that we, we know this is

the first protocol
but, but, uh, –
SUSAN J. BALLIET: It's certainly one of the original
protocols on which, from which all of those other protocols have
stemmed, and, um, especially with the connection of Mr. Rees
having worked in Oklahoma and been involved in it, I think it's
very relevant to, and also being involved in our lethal injection
procedure, we feel it's highly relevant.
JUDGE ROGER CRITTENDEN: Well, what is it in here that we're
talking about that is relevant because, I mean, –
SUSAN J. BALLIET: Page 4, Paragraph F, um, describes the, the
execution and that really is the only part that I wanted to
ask Mr. Rees about.
JUDGE ROGER CRITTENDEN: That's fine. Let's go straight to
that. I'll overrule the objection as to, as to – as long as
we're sticking strictly with the F.
SUSAN J. BALLIET: Um, Mr. Rees, I, I'll just read this,
this one section. It's on page 4. "Specific Execution
Procedures. The execution shall be by means of a continuous
intravenous administration of a lethal

quantity of sodium
21 thiopental combined with either tubocurarine or succinylcholine
22 chloride or potassium chloride, which is an ultra-short-acting
23 barbiturate combination with a chemical paralytic agent." Do you
24 – does that refresh your recollection as to Oklahoma's protocol
25 that you helped write?

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1 JOHN REES: No ma'am, it doesn't. I mean I can read it just
2 as you did, but I am not, not a pharmacologist. Uh, this is a
3 long time ago, and, uh, I've worked in a lot, lot of different
4 correctional settings subsequent to this.
5 SUSAN J. BALLIET: Um, this, uh, on the front page, it says
6 it was issued in 1978. Was that – was that not one of the years
7 that you were working there?
8 JOHN REES: Clearly, I worked for the gentleman who signed
9 it and I was involved in drafting this document at the time.
10 Would I have been involved in determining the specifics regarding
11 the pharmacological aspects? I wouldn't have. As it indicates
12 in the policy, the Department's Medical

Director was involved in
13 that process.
14 SUSAN J. BALLIET: Were any, uh, lethal injection executions
15 carried out while you were in Oklahoma?
16 JOHN REES: No, they were not.
17 SUSAN J. BALLIET: What was your participation in drafting
18 Kentucky's lethal injection protocol?
19 JOHN REES: Nothing, uh, with regard to the, uh, uh, initial
20 drafting of the protocol, I c-, was involved in the revisions of
21 the, uh, the latest revisions.
22 SUSAN J. BALLIET: And when were those latest revisions?
23 JOHN REES: Um.
24 SUSAN J. BALLIET: December 2004?
25 JOHN REES: Yeah, late last – late last year.
26 (Inaudible/muffled voices)

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1 SUSAN J. BALLIET: Number 1, those are – #1, already with
2 the Court. Uh, who recommended making the changes in 2004?
3 JEFF MIDDENDORF: Objection, Judge.
4 JUDGE ROGER CRITTENDEN: Wait –
5 JEFF MIDDENDORF: They're going to start getting into
6 reasons why things were changes – changed? You've already ruled
7 on this matter. It doesn't make a difference

why they were
changed.
JUDGE ROGER CRITTENDEN: I'll sustain it.
THEODORE S. SHOUSE: Judge, that's not my understanding of
the Court's ruling from last Friday at all. They filed a Motion
in Limine to limit testimony to what Mr. Middendorf just said. I
thought every one of their Motions in Limine was overruled except
those we agreed on with regard to Professor Denno and, I'm sorry,
I can't recall what #6 on their list was. They filed a Motion in
Limine saying you came asking the Court to rule that you cannot
talk about how decisions – what the decision-making process was.
And then we, our counterargument last Friday was that without
understanding how we went from Protocol #1 to the protocol we
have today, there can no true understanding of where we are.
It's as if it fell from the sky.
JUDGE ROGER CRITTENDEN: Well, I think what, what the ruling
was is we're going to limit. We're not going into the entire
protocol. But I, I don't mind if, if you want to going into the
specific areas of what, what the changes were.

But I, and, and –

26 JEFF MIDDENDORF: Okay, may I have just one second, please?

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1 JUDGE ROGER CRITTENDEN: Yes.

2 SUSAN J. BALLIET: Um, who recommended changing from two to

3 three grams of sodium thiopental –

4 JEFF MIDDENDORF: Objection, Judge. We're –

5 JUDGE ROGER CRITTENDEN: I'm going to overrule that. Let

6 him answer that.

7 JOHN REES: I'm not sure that, uh, any one individual

8 recommended changing from two to three grams. There were

9 discussions that took place with various members of the

10 Department. Uh, and, uh, we were making changes. We knew that

11 there were, uh, some jurisdictions that used, uh, two grams,

12 there were some that used three. We were concerned about the

13 ability of getting more of the chemical into the hypodermic and

14 through the needle so that there would only need to be one, uh,

15 one, uh, injection. We determined that we could get three grams,

16 uh, without changing either the needle size or

the number of, uh,
17 uh, IV, uh, insertions, and so we did it.
18 SUSAN J. BALLIET: Were there any, um, medical personnel
19 consulted on the increase?
20 JOHN REES: No.
21 SUSAN J. BALLIET: Uh, what about the change to allow the
22 IV Team to attempt sticking the needle into the inmate for an
23 hour? Who recommended that change?
24 JOHN REES: I think that was my recommendation. Uh, I was,
25 uh, uh, concerned, uh, about the question of a, a cutdown. And
26 we decided that should we be unable to easily locate and, uh, be

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1 able to, to properly insert, uh, uh, an IV, uh, we would, uh,
2 try, and if we failed, then we would, uh, make the phone call.
3 SUSAN J. BALLIET: Was there any, uh, medical consultation
4 on that change?
5 JOHN REES: No, not that I recall.
6 SUSAN J. BALLIET: Have your responsibilities changed under
7 the new lethal injection protocol?
8 JOHN REES: Not really.
9 SUSAN J. BALLIET: And what are your responsibilities under

the most recent protocol?
JOHN REES: I'm the overall manager of and support person
for the Warden at the Penitentiary.
SUSAN J. BALLIET: Will you be present at Eddyville during a
lethal injection?
JOHN REES: I will not.
SUSAN J. BALLIET: Where will you be?
JOHN REES: I will be here in Frankfort.
SUSAN J. BALLIET: Are you familiar with the drugs, I
presume, in the Kentucky protocol?
JOHN REES: Uh, by name, yes, I'm familiar with them.
SUSAN J. BALLIET: And why are there three drugs used
instead of two?
JOHN REES: I'm not a pharmacist or a pharmacologist and I
did not, uh, develop that protocol, uh, that three-drug cocktail,
if you will. That was, that is the standard drug cocktail that

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is used, uh, in varying jurisdictions across the country, for the
Federal Bureau of Prisons to adjoining states.
SUSAN J. BALLIET: A moment, please. Um, are you, are you
aware that there are states that use more than three grams of

sodium thiopental?
JOHN REES: I think I am. I, I knew there were varying
amounts.
SUSAN J. BALLIET: And what is your awareness on, of the
states that use more than three?
JOHN REES: I don't know specifics.
SUSAN J. BALLIET: Just that there are such states?
JOHN REES: Yeah.
SUSAN J. BALLIET: Um, is the needle size determined by the
IV Team, what size needle they would use in any individual
execution?
JOHN REES: I believe it's determined by the, uh, directions
on the, on the chemical, but I'm not sure of that.
SUSAN J. BALLIET: Do you have any medical background at
all?
JOHN REES: No, ma'am.
SUSAN J. BALLIET: Uh, did you look at the New Jersey, uh,
protocol when the changes were made on the – the most recent
changes in –
JOHN REES: No, I did not.
SUSAN J. BALLIET: · Kentucky? I have no more questions at
this time.

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JUDGE ROGER CRITTENDEN: Thank you. Mr. Middendorf?
JEFF MIDDENDORF: Judge, we have no questions for this witness.
JUDGE ROGER CRITTENDEN: Thank you, Commissioner. You can step down and be excused.
THEODORE S. SHOUSE: One moment, please.
JUDGE ROGER CRITTENDEN: What? Wait a second, please. See if they have another question.
SUSAN J. BALLIET: Could I ask one more question?
JUDGE ROGER CRITTENDEN: Certainly, go ahead.
SUSAN J. BALLIET: Commissioner Rees, are you aware that some states don't use the same chemicals as Kentucky?
JOHN REES: No, I'm not.
SUSAN J. BALLIET: Thank you.
JUDGE ROGER CRITTENDEN: Thank you. Thank you, Commissioner. You may step down now. I would say you're excused, but you're a defendant in the matter, so whatever you want to do. Mr. Shouse.

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IN THE CIRCUIT COURT
FOR FRANKLIN COUNTY
COMMONWEALTH OF KENTUCKY

RALPH BAZE, and, THOMAS C. BOWLING, Plaintiffs, v. JOHN D. REES, Commissioner, Kentucky Department of Corrections, Frankfort, Kentucky; GLENN HAEBERLIN, Warden, Kentucky State Penitentiary, Eddyville Kentucky, and, UNKNOWN EXECUTIONERS, Defendants.	CIV. ACTION 04-CI-01094

April 19, 2005

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* * * *

SUSAN J. BALLIET: Would you please state your name and
spell your last name, and your first name, also?
GLENN HAEBERLIN: Okay. Glenn, G-L-E-N-N, Haeberlin,
H-A-E-B-E-R-L-I-N.

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SUSAN J. BALLIET: Thank you. How are you currently
employed?
GLENN HAEBERLIN: Uh, I am the Warden at the Kentucky State
Penitentiary.
SUSAN J. BALLIET: When did you become Warden?
GLENN HAEBERLIN: Uh, September of 2002.
SUSAN J. BALLIET: And what are your responsibilities as
Warden?
GLENN HAEBERLIN: Uh, management of a maximum security male
facility which houses approximately, uh, 900 inmates.
SUSAN J. BALLIET: Have you ever been in charge of a lethal
injection?
GLENN HAEBERLIN: Uh, in charge, no.
SUSAN J. BALLIET: Who would be in charge of a lethal

injection if you were out sick the day of an execution?
GLENN HAEBERLIN: Uh, one of my Deputy Wardens.
SUSAN J. BALLIET: How many executions have been conducted
while you've been Warden?
GLENN HAEBERLIN: Uh, none.
SUSAN J. BALLIET: And what are your duties in event – in
the event there is a lethal injection execution?
GLENN HAEBERLIN: Uh, my duties would be to, uh, oversee the
process and, ultimately, uh, carry out the, uh, execution.
SUSAN J. BALLIET: How many members are there on the
Execution Team?

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GLENN HAEBERLIN: Uh, excluding myself and the Deputies, uh,
13.
SUSAN J. BALLIET: And how many Deputies are there?
GLENN HAEBERLIN: Uh, three.
SUSAN J. BALLIET: Does each of the members of the team have
a specific duty?
GLENN HAEBERLIN: Uh, there are two people that are
specifically responsible for starting IVs. There is a, uh,

Team Commander and Co-Commander. And the additional security personnel that are on there are, uh, basically there for security purposes. They perform mul–, actually multiple roles.

SUSAN J. BALLIET: Do you directly supervise the Execution Team?

GLENN HAEBERLIN: Yes.

SUSAN J. BALLIET: Is that from start to finish?

GLENN HAEBERLIN: Yes.

SUSAN J. BALLIET: Do you directly supervise the IV Team?

GLENN HAEBERLIN: Uh, ultimately, yes.

SUSAN J. BALLIET: Are you present and overseeing everything that they do throughout the execution?

GLENN HAEBERLIN: Uh, am, am I specifically with them the entire time that they're in, in our facility? No, ma'am, I'm not.

SUSAN J. BALLIET: Can you tell us what point you stop overseeing them directly?

GLENN HAEBERLIN: When it is concluded.

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SUSAN J. BALLIET: Um, do you remember when we took your deposition on October 19th, um – I'll hand you

here..
MALE VOICE: That's okay. (Inaudible)
SUSAN J. BALLIET: Referring you to page 10 of the
deposition, and I'll give you a copy. Do you have a copy? I
believe you said at your deposition that there was a point at
which you stopped supervising the IV Team, and that then –
actually that's on page 7 – that up to a point, and then the
Execution Team is the one that is directly responsible for what
occurs in the short time actually before the execution.
GLENN HAEBERLIN: That, what I was actually referring to
was that they are in direct supervision of the inmate. Obviously
I, I'm not there during the entire time that they are in the
institution, okay?
SUSAN J. BALLIET: Um, are you present with them in the
Control Room?
GLENN HAEBERLIN: Not during the execution, no.
SUSAN J. BALLIET: And so, then, wouldn't that mean that
you're not directly supervising that part of it?
GLENN HAEBERLIN: Ma'am, I'm standing in the Execution
Chamber with the inmate. I, I, I can't be in

every room during
22 an execution.
23 SUSAN J. BALLIET: Your Honor, I would like to ask
24 permission to treat this witness as an adverse witness.
25 JUDGE ROGER CRITTENDEN: Um, go ahead.
26 SUSAN J. BALLIET: Is that, I'm sorry, did you say that –

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1 JUDGE ROGER CRITTENDEN: Yes. Yes, go ahead.
2 SUSAN J. BALLIET: Thank you. Um, so, uh, at, at, at a
3 certain point, isn't it true that the Team Leader, the IV Team is
4 really on its own inside the Execution Chamber?
5 GLENN HAEBERLIN: As well as the ex- – as well as the
6 Commander of the Execution Team itself. He is in there as well.
7 SUSAN J. BALLIET: Is the Commander the Executioner?
8 GLENN HAEBERLIN: Could be.
9 SUSAN J. BALLIET: Is the team – is the IV Team, is their
10 identity a secret?
11 GLENN HAEBERLIN: Yes.
12 SUSAN J. BALLIET: How many members of the Execution Team

are maintained with secret identity?
GLENN HAEBERLIN: All of them.
SUSAN J. BALLIET: So that's 13?
GLENN HAEBERLIN: Yes.
SUSAN J. BALLIET: Um, what is the task of the IV Team?
GLENN HAEBERLIN: Uh, their basic task is to, once the
inmate has been strapped to the gurney, is to insert two
catheters, uh, in the inmate to be executed.
SUSAN J. BALLIET: Okay. Do they also strap the inmate to
the gurney?
GLENN HAEBERLIN: They do not.
SUSAN J. BALLIET: And what do the other Execution Team
members do?

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GLENN HAEBERLIN: They have a, a, a variety of functions
which, uh, generally relate to the security of, uh, the Execution
Chamber itself, basically stationed outside, and to control entry
and exit of, of people coming in and out of the building.
SUSAN J. BALLIET: How are the team members selected?
GLENN HAEBERLIN: Uh, they basically, uh, through, say, in
some cases a written and some cases word of

mouth, uh, wish to
volunteer for the team.
SUSAN J. BALLIET: And who gives the final approval of each
team member?
GLENN HAEBERLIN: Uh, it, it's basically a joint decision
between myself and the, uh, Execution Team leader.
SUSAN J. BALLIET: How many of the current team members have
prior lethal injection experience?
GLENN HAEBERLIN: Um, one on the IV Team and probably
somewhere in the neighborhood of 10 on the regular team.
SUSAN J. BALLIET: And could you describe that experience?
GLENN HAEBERLIN: Uh, basically, uh, in execution of, uh,
Eddie Harper, uh, most of those folks were involved, to include
one of the IV Team, uh, members. Uh, obviously we practice, uh,
once a month, uh, each, each – or during the calendar year – uh,
on varying dates, uh, and they're involved in that capacity.
SUSAN J. BALLIET: Well, how many of the team members have
actual experience in an actual execution?
GLENN HAEBERLIN: Uh, probably 10.

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SUSAN J. BALLIET: What training have you received on how to conduct a lethal injection execution?
GLENN HAEBERLIN: Uh, uh, other than the training that we routinely perform once a month? None.
SUSAN J. BALLIET: Have any of your Deputy Wardens received formal training in how to conduct a, a lethal injection execution?
GLENN HAEBERLIN: Uh, specifically no. They have been involved in witnessing executions in other states, but, uh, none of lethal injection.
SUSAN J. BALLIET: How many of your Deputies have witnessed exec- – lethal injection executions in other states?
GLENN HAEBERLIN: None. I th-, I thought I just said that.
SUSAN J. BALLIET: Okay. What written training manuals do you have on lethal injection?
GLENN HAEBERLIN: Within the protocol that we have, there, there are no training manuals.
SUSAN J. BALLIET: Um, when you were working at the prison when – were you working at the prison when

lethal injection
20 became law, or an option?
21 GLENN HAEBERLIN: I'm sorry, would you please repeat that?
22 SUSAN J. BALLIET: Were you working at the prison when lethal
23 injection passed the Kentucky Legislature?
24 GLENN HAEBERLIN: I was.
25 SUSAN J. BALLIET: And was that in 1998?

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1 GLENN HAEBERLIN: Uh, I think it became effective
2 March 31st, 1998.
3 SUSAN J. BALLIET: And you were Deputy Warden for Programs
4 at that time?
5 GLENN HAEBERLIN: Uh, I was.
6 SUSAN J. BALLIET: And, um, were you – you did participate
7 in instituting lethal injection?
8 GLENN HAEBERLIN: I did.
9 SUSAN J. BALLIET: What other states did you look at?
10 GLENN HAEBERLIN: Uh, I know there were some visits that
11 occurred to the State of Indiana. Uh, I think there were some
12 visits that occurred to the State of Virginia. Uh, beyond that,
13 I honestly don't recall. I, I, I never was a part of the, the,
14 ul., forward team that went and observed

those.
SUSAN J. BALLIET: Were any medical people consulted?
GLENN HAEBERLIN: Uh, specifically, I, I, I do not recall.
SUSAN J. BALLIET: Um –
GLENN HAEBERLIN: May have been, uh, I mean as far as, uh, I mean, I was not necessarily involved in all of the meetings that Warden Parker was at the time, uh, as, as far as with Justice officials or Corrections officials or, so, I mean, I, I can't honestly answer to say whether or not specific medical people were contacted or not.
SUSAN J. BALLIET: Um, did you go in person to visit other states to look at lethal injection procedures?
GLENN HAEBERLIN: I did not.

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SUSAN J. BALLIET: At, with permission, I would like to mark the, the main part, the 2002 Lethal Injection Protocol, as Plaintiffs' 8.
JUDGE ROGER CRITTENDEN: Okay. Thank you.
(Inaudible/mixed and muffled voices)
SUSAN J. BALLIET: Um, (inaudible). Just

for clarification,
it's my understanding that, well, the materials that we received
from the Defendants, the Lethal Injection Protocol, consists of
basically three documents that we've been given. One is the
1999, 1998, um, protocol, which has been marked as Plaintiffs' 2.
And are you familiar with the old 1999, 1998 protocol that was
used with Eddie Harper?
GLENN HAEBERLIN: Yes.
SUSAN J. BALLIET: And another part of it has been marked
as Plaintiffs' 1, and that is the revisions, the most recent
revisions of 2004. Plaintiffs' 8 is kind of the guts of, of the
protocol and, um, in order to understand – would you agree that
in order to understand the current protocol, you have to look at
both Plaintiffs' 8 – which I've just handed you – and the 2004
revisions, which are Plaintiffs' 1?
GLENN HAEBERLIN: I, I would probably agree with that, yes.
SUSAN J. BALLIET: Okay. Good. And that's getting on the
same page. Um, I would move into evidence Plaintiffs' Exhibit 8,
which is the 2002 –
JEFF MIDDENDORF: No objection as long as

it's under seal,
26 Judge.

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1 JUDGE ROGER CRITTENDEN: All right. So ordered.
2 SUSAN J. BALLIET: Were any studies conducted as a basis for
3 any of the 2002 changes – or, I'm sorry – the 2004 changes?
4 GLENN HAEBERLIN: Uh, define "studies."
5 SUSAN J. BALLIET: Well, did you consult any medical
6 personnel on the changes?
7 GLENN HAEBERLIN: We, we did not.
8 SUSAN J. BALLIET: Did you consult anyone outside the prison
9 personnel on the changes?
10 GLENN HAEBERLIN: We talked with several different states,
11 uh, Indiana being one, uh Tennessee being another, uh, and, to my
12 knowledge, there was some contact with the, uh, Federal Bureau of
13 Prisons regarding, uh, their protocol, as well – specifically, I
14 think what, what, what drugs were those states using.
15 SUSAN J. BALLIET: Does the Department of Corrections
16 provide any training to the IV Team on how to insert an IV?
17 GLENN HAEBERLIN: Other than the

practices that we do on,
on, on a monthly basis? No. However, the two people involved
are, uh, that's what they do as a regular part of, of either,
uh, duties that they have, uh, and, and/or their specific job
assignments on a daily basis in Corrections.
SUSAN J. BALLIET: Well, let's take them one at a time.
IV Team Member #1, what would that person's background be?
GLENN HAEBERLIN: Uh, they, they are a, basically a
practicing phlebotomist.
SUSAN J. BALLIET: And IV Team #2?

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GLENN HAEBERLIN: Is an Emergency Medical Technician.
SUSAN J. BALLIET: How long has the phlebotomist been a
phlebotomist?
GLENN HAEBERLIN: Uh, approximately, uh, eight years.
SUSAN J. BALLIET: And how long ago did the EMT work as an
EMT?
GLENN HAEBERLIN: I think they have been certified for the
last 20 years.
SUSAN J. BALLIET: When did you get that information?

GLENN HAEBERLIN: Uh, within the last two years. Uh, uh, one of them has been on the team about 18 months, and the other one has been on the team since, uh, 1997.

SUSAN J. BALLIET: If you would look at page 60 of your deposition, um, at the time of your deposition, I believe you did not know how long the EMT person had been an EMT. Is that correct? Um, looks like it's the last question.

GLENN HAEBERLIN: That's what it said.

SUSAN J. BALLIET: Okay. Uh, what investigation do you, have you done to see if the IV Team volunteers have the experience and training that they claim to have?

GLENN HAEBERLIN: Uh, I don't know that I understand your question.

SUSAN J. BALLIET: Well, I understand that people come and they want to volunteer to be part of an execution, they want to be part of killing someone legally. Um, these are volunteers.

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Do you do any investigation into their background to see if they have the training and experience that they

claim that they have?
GLENN HAEBERLIN: Uh, if, if, if it was someone specifically involving the IV Team, obviously I, I would attempt to look at it, see what their qualifications would be and, and, and, or what their training and certifications are.
SUSAN J. BALLIET: Would you have someone make phone calls and get copies of their resumes and call the schools that they went to, to see –
GLENN HAEBERLIN: If necessary.
SUSAN J. BALLIET: Have you ever done that?
GLENN HAEBERLIN: Have not.
SUSAN J. BALLIET: Um, how long is the waiting list –
GLENN HAEBERLIN: Now let me, let me, let me rephrase that. The, the one, the most recent, uh, it was basically verified that they were qualified for the position that they occupied and the skills that they had.
SUSAN J. BALLIET: And would that be the phlebotomist or the EMT?
GLENN HAEBERLIN: Correct.
SUSAN J. BALLIET: The phlebotomist?
GLENN HAEBERLIN: Yes.
SUSAN J. BALLIET: But, and, for the EMT, no check has been

made?
GLENN HAEBERLIN: No.

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SUSAN J. BALLIET: How long is the waiting list of
volunteers wanting to become part of the execution –
JEFF MIDDENDORF: (Inaudible)
JUDGE ROGER CRITTENDEN: I'll sustain.
SUSAN J. BALLIET: I, I understand you are in the room with
the condemned person when he dies from a lethal injection.
GLENN HAEBERLIN: That's correct.
SUSAN J. BALLIET: And I understand that, um, your Deputy
Warden for Security Pershing will be the only other person in the
room with you?
GLENN HAEBERLIN: Besides the inmate, yes.
SUSAN J. BALLIET: And were you present at Harper's
execution?
GLENN HAEBERLIN: I, I was present, yes, and witnessed.
SUSAN J. BALLIET: Where were you standing with relation to
Harper?
GLENN HAEBERLIN: The Harper execution was conducted,
actually, in the old Execution Chamber in the

basement of
19 3 Cellhouse. Uh, I was positioned at the doorway outside in the
20 hallway from where the, uh, basically directly adjacent to the
21 Execution Chamber.
22 SUSAN J. BALLIET: About how many feet were you from Harper?
23 GLENN HAEBERLIN: From here to that podium.
24 SUSAN J. BALLIET: About –
25 GLENN HAEBERLIN: Ten feet, maybe.
26 SUSAN J. BALLIET: – ten feet. And what did you see?

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1 GLENN HAEBERLIN: At, at what point in time?
2 SUSAN J. BALLIET: Did Harper change color?
3 GLENN HAEBERLIN: Uh, what I saw was, uh, uh, I had a radio
4 with earpiece and was aware of when the lethal injection began.
5 Uh, what I observed was, uh, Inmate Harper went to sleep probably
6 within the first 10 seconds after the command to proceed was
7 given. Uh, within 15 seconds he was asleep, uh, or what I, what
8 I assumed to be he was asleep. That's what it, that was the way
9 it appeared to me. Uh, I saw him briefly lick

his lips. I saw
his big toe move.
After that, there was absolutely no movement whatsoever.
Uh, it appeared to me that his breathing ceased. Uh, he changed,
uh, color to the degree of he had a, a slight purple cast to him
and what appeared to me to be just a, a slight grayish appearance
to the skin, uh, and remained in that fashion until he was
pronounced dead.
SUSAN J. BALLIET: From where you were standing outside the
room, would you have been able to see if the IV was staying in?
GLENN HAEBERLIN: Um, on, on one side, yes, perhaps on the
other side, no. Because h e was turn- – he was turned at a, at
a, at a slight angle from the position where I was.
SUSAN J. BALLIET: Um, at your deposition, you said that the
Executioner in the little separate room, the Executioner and the
IV Team could see pretty much everything. Do you recall saying
that?
GLENN HAEBERLIN: Yes.

SUSAN J. BALLIET: What did you mean by "pretty much"? What is it the Executioner and the IV Team might not be able to see?

GLENN HAEBERLIN: Well, they were in a far better position to see than I was and ac-, and actually were a little bit in, in a little bit closer proximity. Uh, I mean, uh, as far as being able to see the IVs and see the lines and all that, they were certainly capable of doing that.

SUSAN J. BALLIET: Uh, would you agree the protocol doesn't instruct the IV Team on what they should be watching for during the execution?

GLENN HAEBERLIN: Well, if, if we wrote into this plan what everybody's role and specific, "I'm going to look at A, B, C, D, E, F," we wouldn't be able to cart it in this room. I think that it's, given the gravity of the situation that is occurring, those people know what to do. They know what to look for.

SUSAN J. BALLIET: Are the drugs injected into separate lines or all into one line?

GLENN HAEBERLIN: They are, they're, our, our protocol basically says we start two lines. They will use

one line. If
there's a possibility that that line becomes unusable, then they
will switch to the second line.
SUSAN J. BALLIET: Does the IV line, or the lines, run from
the Executioner to the inmate?
GLENN HAEBERLIN: Yes.
SUSAN J. BALLIET: It does – do these lines have to go
through a wall?

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GLENN HAEBERLIN: They go through, in the new facility, they
go through an opening in the wall that's approximately two inches
in diameter.
SUSAN J. BALLIET: If the line started leaking, what would
you do?
GLENN HAEBERLIN: I would, uh, by radio, contact the
Execution Team and the, and the Executioner, and advise them that
they needed to switch to the second line.
SUSAN J. BALLIET: What monitoring is done to ensure that
the drugs are getting to the inmate in the proper amount?
GLENN HAEBERLIN: I don't know that I understand your
question.

SUSAN J. BALLIET: Well, with Eddie Harper, you'd agree you were trying to deliver two grams of sodium thiopental?
GLENN HAEBERLIN: Correct.
SUSAN J. BALLIET: What monitoring is done to ensure that two grams of sodium thiopental actually got to Eddie Harper?
GLENN HAEBERLIN: Well, they, they are obviously looking at the, the syringe in their hand. And when it's empty and there are no observed leaks or any other indication, whether it be a swelling in the arm or wherever the placement of the IV is, there's a reasonable assurance that it got to where it went, to, to include the fact that he's gone to sleep.
SUSAN J. BALLIET: Um, it's, what's the purpose of the EKG?
GLENN HAEBERLIN: Basically to monitor his, uh, cardioelectrical activity.

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SUSAN J. BALLIET: Are you aware of conscious paralysis?
GLENN HAEBERLIN: I, I have heard the term, yes.
SUSAN J. BALLIET: When did you first hear the term?

GLENN HAEBERLIN: Uh, have, have seen it on TV. Obviously it was at the deposition at the Penitentiary.

SUSAN J. BALLIET: Was the deposition in October of 2004 the first time you heard of it?

GLENN HAEBERLIN: No.

SUSAN J. BALLIET: When was the first time?

GLENN HAEBERLIN: Uh, it was probably actually in the newspaper.

SUSAN J. BALLIET: A you aware that you said no, that you were not aware of conscious paralysis? If you look on page 44 of your deposition, you answered no, that you – just to refresh your memory.

JEFF MIDDENDORF: Your Honor, what's the relevance of this. I, I object.

SUSAN J. BALLIET: Well, the relevance is that, um, we believe that the inmate was –

JUDGE ROGER CRITTENDEN: Well, you can speak to me, uh, since he objected to me. What, what is the relevance?

SUSAN J. BALLIET: The relevance is we believe the inmate was conscious and aware of everything that was happening during the execution, and it's important to know

whether the prison
25 includes anything in their protocol, whether they did and whether
26 that is still in the protocol now.

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1 JUDGE ROGER CRITTENDEN: You can ask if there is anything in
2 the protocol that they, they monitored the prisoner with, or what
3 they have that they monitor.
4 SUSAN J. BALLIET: And, Your Honor, also, um, Warden
5 Haeberlin has said that there's a lot of things they do that are
6 not written in the protocol, so I (inaudible) –
7 JUDGE ROGER CRITTENDEN: Well, I mean, you can ask if
8 there's any, any monitoring that's done.
9 SUSAN J. BALLIET: All right. What steps were taken to
10 prevent or discover whether Eddie Harper was consciously aware
11 during his execution?
12 GLENN HAEBERLIN: I, I can't answer that because I wasn't,
13 I wasn't the person in charge. But I, I'm not aware of, uh, I
14 honestly don't know what you'd look for.
15 SUSAN J. BALLIET: Did you see him shed any tears?
16 GLENN HAEBERLIN: I, I did, I did not observe any tears.

SUSAN J. BALLIET: Could he have, from where you were standing, could he have shed a tear and you wouldn't have seen it?
GLENN HAEBERLIN: Yes.
SUSAN J. BALLIET: How was the injection rate monitored by the Executioner?
GLENN HAEBERLIN: I, I don't understand what you mean, "monitored." I mean, the Executioner is actually the one, I mean, he's the one that is actually pushing the lethal chemicals.
SUSAN J. BALLIET: Right. And how does he –

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GLENN HAEBERLIN: Well, I mean, it, I mean, it's monitored to the degree that I, I'm standing in the Execution Chamber and I know when, uh, there's usually an announcement that's made that Step 1 is complete, Step 2 is complete. I mean, I, I, I have some understanding of how long it takes to push the chemicals.
SUSAN J. BALLIET: Would you agree, um, with what you said at your deposition, that he does it by feel?
GLENN HAEBERLIN: That's correct.

SUSAN J. BALLIET: Uh, does the Executioner have to unscrew one syringe and screw in another before he can push the next drug?

GLENN HAEBERLIN: He does.

SUSAN J. BALLIET: Do you recall how long it took to lethally inject Eddie Harper?

GLENN HAEBERLIN: Twelve minutes, 15 minutes, somewhere in that, in that neighborhood.

SUSAN J. BALLIET: Um, at your deposition, it, on page 46, you said it took 15 minutes. Would you agree with –

GLENN HAEBERLIN: That's –

SUSAN J. BALLIET: Are you disagreeing with that now?

GLENN HAEBERLIN: That would may be, that may be what it was.

SUSAN J. BALLIET: All right. Was that longer than the practice runs?

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GLENN HAEBERLIN: Probably a little bit longer in that the practice runs, there is, uh, no resistance on the, uh, the actual catheter itself.

SUSAN J. BALLIET: If you can't – in an

upcoming execution,
if you can't site a vein in the crook of the arm, where would
you, where would the IV Team go next?
GLENN HAEBERLIN: Hand.
SUSAN J. BALLIET: And where after that?
GLENN HAEBERLIN: Somewhere in the, in the foot or lower leg
area.
SUSAN J. BALLIET: Would they go to the ankle?
GLENN HAEBERLIN: Possibly and, and, it would depend upon
what they determined would be, uh, the best possible site to do
that.
SUSAN J. BALLIET: And would they ever go to the neck?
GLENN HAEBERLIN: As, as, as a last resort, yes.
SUSAN J. BALLIET: I believe you said they would go to the
carotid artery in your deposition (inaudible).
GLENN HAEBERLIN: Carotid artery.
SUSAN J. BALLIET: Um, do the drugs – the drugs have to
travel about five feet to the condemned prisoner?
GLENN HAEBERLIN: That's accurate.
SUSAN J. BALLIET: And would you say there's about a foot
of IV line inside the [illegible] room and the remaining four feet
outside the room?

GLENN HAEBERLIN: Foot, foot and a half, maybe.

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SUSAN J. BALLIET: Inside the room?
GLENN HAEBERLIN: Inside the ex-, inside the Executioner's area, yes.
SUSAN J. BALLIET: On both of the lines? There are two lines.
GLENN HAEBERLIN: Yes.
SUSAN J. BALLIET: Okay. Um, how much of the IV lines can the IV Team see, and the Executioner – from inside the room, how much of those lines can they see that are extending outside the room?
GLENN HAEBERLIN: All of them.
SUSAN J. BALLIET: Has the Executioner had any medical training?
GLENN HAEBERLIN: To, to my knowledge, no.
SUSAN J. BALLIET: Is the Executioner always the same person?
GLENN HAEBERLIN: Uh, it is not.
SUSAN J. BALLIET: And how is that Executioner chosen?
GLENN HAEBERLIN: Uh, it is basically a decision between,

uh, the, uh, Commander of the Execution Team and team members.
It could be, it could be more than one.
SUSAN J. BALLIET: And who makes the final call?
GLENN HAEBERLIN: Myself and the Team Leader.
SUSAN J. BALLIET: I'd like to talk about the 2004 changes
and, um, it's already been marked as, I believe, Exhibit 1, but
I'll hand you a copy of it in case you need to refer to it. Do

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you need a copy? All right. Um, I believe these were revised in
December of 2004 after the beginning of this litigation. Would
you agree to that?
GLENN HAEBERLIN: Yes.
SUSAN J. BALLIET: Um, how many times would this provision,
the new provisions, allow the IV Team to stick the inmate with
needles?
GLENN HAEBERLIN: Uh, I think the protocol specifically says
that they would attempt to site, uh, IVs for up to an hour.
SUSAN J. BALLIET: And I believe, um, Commissioner Rees said
that he recommended that. Would you agree

that that came from
Commissioner Rees?
GLENN HAEBERLIN: It was a, basically a decision that was
reached between he, he and myself, yes.
SUSAN J. BALLIET: And who was in on the discussion leading
up to that decision?
GLENN HAEBERLIN: Uh, I think Mr. Middendorf and the Deputy
Commissioner, uh, Million.
SUSAN J. BALLIET: Were any outside medical authorities
consulted on that?
GLENN HAEBERLIN: To my knowledge, no.
SUSAN J. BALLIET: If your team cannot get an IV inserted
after one hour, what will you do?
GLENN HAEBERLIN: Uh, we, I will exit the Execution Chamber
and, uh, contact our General Counsel and advise that we were

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unsuccessful in starting an IV, and basically ask that a, a new
date be set. I mean, ultimately, that's what would happen.
SUSAN J. BALLIET: If the Governor calls the execution off,
what will you do to ensure that you won't have the same problems
at the rescheduled execution?

GLENN HAEBERLIN: Uh, train some more, I guess.
SUSAN J. BALLIET: Um, what kind of training would you get?
GLENN HAEBERLIN: Practices, consistent with what we do now.
SUSAN J. BALLIET: If the Governor says, "Go ahead with the execution. I don't care that it's been an hour," what will you do?
JEFF MIDDENDORF: Objection, Judge.
JUDGE ROGER CRITTENDEN: I'll sustain.
JEFF MIDDENDORF: This is all speculation.
JUDGE ROGER CRITTENDEN: I'll sustain.
SUSAN J. BALLIET: Um, on the 2004 changes, I see the thiopental has been changed from two to three grams. Who recommended that change?
GLENN HAEBERLIN: That was a, uh, decision made between myself and, uh, Commissioner Rees.
SUSAN J. BALLIET: And who was in on the discussion?
GLENN HAEBERLIN: Uh, Mr. Middendorf and, uh, George Million, Deputy Commissioner.
SUSAN J. BALLIET: Were any outside medical author–, any medical authorities consulted on that?

GLENN HAEBERLIN: To my knowledge, they were not. And I guess one of the reasons why that change was, was, uh, if two was good, three was better, and it did not actually increase the number of steps that the team would have to go through, or that we would have to go through in order to, uh complete the execution.

SUSAN J. BALLIET: Looking at page 4, paragraph 16 – well, now wait. Let me just ask, I don't know if I have that reference correct, but what new role has been given to you as Warden regarding monitoring the inmate's consciousness?

GLENN HAEBERLIN: I don't know that I, that I understand your question. Are you, are you, are you looking at something in the protocols?

SUSAN J. BALLIET: Um, I believe so, but I'm – it, after 60 seconds, is there a new rule that if he's not unconscious, that –

GLENN HAEBERLIN: Yes.

SUSAN J. BALLIET: What is the new provision?

GLENN HAEBERLIN: Basically the new provision is, is that,

you know, uh, I, I determine that a, that he is non-conscious,
that a second round of sodium thiopental would be delivered.
SUSAN J. BALLIET: Is that what happened at the Eddie Harper
execution?
GLENN HAEBERLIN: No.
SUSAN J. BALLIET: Because, um, were there two infusions of
sodium thiopental at that execution?

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GLENN HAEBERLIN: There were two syringes totaling two grams
that Mr. Harper was given.
SUSAN J. BALLIET: Um, at the end of this, of the 2004
changes, Plaintiffs' 1, there is a document called Stabilization
Procedure. I think it is the very last page. When would this
procedure be put into effect?
GLENN HAEBERLIN: In the event, uh, let me look at it just
briefly – in the event that there was a stay given during the
time when the execution drugs had begun to be pushed.
SUSAN J. BALLIET: Who are the medical staff onsite who will
attempt to implement this procedure?
GLENN HAEBERLIN: There will be a

medical doctor that is
there.
SUSAN J. BALLIET: Has that doctor been identified?
GLENN HAEBERLIN: Uh, I think that, uh, in the case of the,
uh, Bowling execution, it was going to be Dr. Haas.
SUSAN J. BALLIET: What training do the medical staff have
in using a defibrillator?
GLENN HAEBERLIN: The defibrillator that we have is what's
called an AED; it is an automated defibrillator.
SUSAN J. BALLIET: What other equipment – well, what
training did the staff have in operating that?
GLENN HAEBERLIN: Well, as, as, as a routine, we train, uh,
even our correctional officers in how to use it. It, it's a,
it's a totally automated system to where the, the, uh, implants
are put on the chest. The machine is turned on. It goes through

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basically a – determine if, if – if the machine itself determines
whether or not the patient has a sufficient rhythm in order for the
the machine to operate.
SUSAN J. BALLIET: When you say "we," are

you including any
medical personnel?
GLENN HAEBERLIN: They're trained as well.
SUSAN J. BALLIET: Who are – but whose, the people who are
doing the training of your staff in how to use the defibrillator,
do the trainers have medical knowledge?
GLENN HAEBERLIN: I, I'll be honest with you, as
specifically wh for the Department does the training, I'm not
sure.
SUSAN J. BALLIET: What other equipment, besides a
defibrillator, will be on the crash cart?
GLENN HAEBERLIN: Well, the, the crash cart basically is a
self-contained, uh, it, it's a case that basically has, uh, all
the, uh, necessary medical equipment, to include, uh, drugs that
would normally be given in a, uh, situation where that was
warranted.
SUSAN J. BALLIET: Have those drugs been identified and
purchased?
GLENN HAEBERLIN: We bought a kit that is, everything is
self-contained therein, to include the medications.
SUSAN J. BALLIET: And what training do

the staff have in
25 using this equipment, the staff that would actually have to use
26 it?

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1 GLENN HAEBERLIN: You'll have to ask Dr. Haas that.
2 SUSAN J. BALLIET: When are the drugs purchased for an
3 execution?
4 GLENN HAEBERLIN: Uh, within that, but basically within the
5 30-day window of an execution.
6 SUSAN J. BALLIET: If you're given less than 30 days, how
7 would you handle purchasing the drugs?
8 GLENN HAEBERLIN: Same as, uh, same as I would otherwise.
9 In the, in, in Mr. Bowling's case, there was a, a shortened
10 window based on when the, uh, uh, Governor signed the Execution
11 Warrant and, uh, procured the drugs without any problem.
12 SUSAN J. BALLIET: Is there a doctor present at the prison
13 during an execution?
14 GLENN HAEBERLIN: Yes.
15 SUSAN J. BALLIET: What is the doctor's role?
16 GLENN HAEBERLIN: Uh, in, in this case, the doctor's role

is, uh, obviously, to pronounce death after the execution has occurred and/or, in the, in the meantime, if there is a stoppage, he would be involved in, uh, uh, instituting the, his revivement. You know, the other part of it is, is there is a ambulance that is from Lyon County that is standing by with, uh, sufficient equipment and training of those folks that would also respond in the event that the inmate would need to be revived.

SUSAN J. BALLIET: Um, at the time of your deposition in October before these latest changes, you answered that the doctor had no other role than to pronounce death. Would, would you

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agree that this expanded role has come as part of the 2004 revisions?

GLENN HAEBERLIN: It, it has become part of the 2004 revision, yes.

SUSAN J. BALLIET: Do you, um, are there any nurses involved?

GLENN HAEBERLIN: Uh, no, other than the possibility of, uh,

and, and by possible injection of, uh – it escapes me at the moment – uh, injection of a sedative beforehand, before the actual execution begins, about an hour and a half out.

SUSAN J. BALLIET: Uh, with permission, I would like to mark, um, these are copies of the actual chemicals that are used, as Plaintiffs' 9.

JUDGE ROGER CRITTENDEN: Right.

(Inaudible/mixed and muffled voices)

MALE VOICE: No objection.

JUDGE ROGER CRITTENDEN: Well, they have moved to admit it. Are you moving to admit (inaudible)?

SUSAN J. BALLIET: I am moving to admit this, yes.

JUDGE ROGER CRITTENDEN: All right, so ordered. So ordered.

SUSAN J. BALLIET: Yes, thank you.

JUDGE ROGER CRITTENDEN: Okay.

SUSAN J. BALLIET: Uh, are you familiar with these chemicals that are depicted here?

GLENN HAEBERLIN: I am. Wait a minute, let me look at the other ones.

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SUSAN J. BALLIET: Take your time.

GLENN HAEBERLIN: I –

SUSAN J. BALLIET: Are these the chemicals that are used in lethal injection in Kentucky?
GLENN HAEBERLIN: They are.
SUSAN J. BALLIET: Who mixes these drugs?
GLENN HAEBERLIN: It would be a member of the Execution Team.
SUSAN J. BALLIET: Is it anyone with medical training?
GLENN HAEBERLIN: Uh, depending upon, it, it possibly could be, if it's somebody that's on the IV Team.
SUSAN J. BALLIET: Um, do you recall that at your deposition you said no, that it was not anyone with medical training?
GLENN HAEBERLIN: I, I may have said that.
SUSAN J. BALLIET: If you look on page 56 of your deposition.
JUDGE ROGER CRITTENDEN: He agrees he may have said it, Ms. Balliet.
SUSAN J. BALLIET: Is the mixing of the drugs rehearsed?
GLENN HAEBERLIN: Uh, it is not.
SUSAN J. BALLIET: Is it supervised by anyone apart from the IV Team?
GLENN HAEBERLIN: Uh, is – there is usually a witness there.
SUSAN J. BALLIET: Supervision means

someone looking at what
25 they're doing, yes.
26 GLENN HAEBERLIN: Yes.

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1 SUSAN J. BALLIET: Is, is there someone there?
2 GLENN HAEBERLIN: Yes, there would be.
3 SUSAN J. BALLIET: Has there been in the past?
4 GLENN HAEBERLIN: Uh, to, to my knowledge, uh, the Deputy
5 Commissioner for Adult Institutions witnessed that process.
6 SUSAN J. BALLIET: And if he denied witnessing it, would you
7 disagree with him?
8 GLENN HAEBERLIN: I, I would.
9 SUSAN J. BALLIET: Did you see him –
10 GLENN HAEBERLIN: No.
11 SUSAN J. BALLIET: – do –
12 GLENN HAEBERLIN: No, I did not.
13 SUSAN J. BALLIET: – the job? All right. And you,
14 apparently you are saying that this is now changing. So who
15 will witness the mixing of the chemicals?
16 GLENN HAEBERLIN: Uh, it, it's going, it, it, it, it's going
17 to be somebody – it's going to be somebody from the facility, and
18 in all likelihood, it's probably going to be me at this point in

time.
SUSAN J. BALLIET: Can you, can you show us where this is
written into the protocol, that you will be witnessing the
mixing?
GLENN HAEBERLIN: It's not necessarily in the protocol. But
a, but as the Warden, I have the ability to do what I feel is
necessary to carry this out in a humane and professional fashion.
SUSAN J. BALLIET: How far in advance are the drugs mixed?

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GLENN HAEBERLIN: Uh, approximately 12 hours.
SUSAN J. BALLIET: And when are they placed in the syringes?
GLENN HAEBERLIN: At that time, they would be placed in the
syringes. There's no actual mixing of the drugs. What, what,
what may be a misnomer about mixing is the sodium thiopental
basically comes in a powder form. There is a 20-milliliter
bottle of sterile water that is also in the same box that the
drug is in. The 20 milliliters of sterile water is actually put
into a syringe, then it is injected into this

bottle right here
10 because it's in powder form. The basic, uh, the powder is then
11 reconstituted into a liquid form. What you're looking for is
12 that you have a clear liquid with no visible particulate, uh, and
13 then that is drawn into a 60cc syringe in preparation for the
14 execution.
15 The other two drugs involved are basically in liquid form
16 and are drawn directly out of the vial that they are in, into the
17 appropriate dosage.
18 SUSAN J. BALLIET: Where did you receive this knowledge?
19 GLENN HAEBERLIN: I can read.
20 SUSAN J. BALLIET: Have you any medical training in, in
21 mixing drugs?
22 GLENN HAEBERLIN: No, ma'am.
23 SUSAN J. BALLIET: How large a syringe do you use?
24 GLENN HAEBERLIN: For what?
25 SUSAN J. BALLIET: For the lethal injection?
26 GLENN HAEBERLIN: Sixty cc.

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1 SUSAN J. BALLIET: And what size needle?
2 GLENN HAEBERLIN: What size needle for what?
3 SUSAN J. BALLIET: For the lethal injection.

for pushing the
lethal chemicals into the line.
GLENN HAEBERLIN: Are you talking about the catheter?
SUSAN J. BALLIET: Yes.
JUDGE ROGER CRITTENDEN: Which? The, the needle that goes
into the condemned or the needle that –
SUSAN J. BALLIET: Uh –
JUDGE ROGER CRITTENDEN: – that goes into the, the lines
that –
SUSAN J. BALLIET: I'm sorry. The size needle that goes
into the condemned.
GLENN HAEBERLIN: It could be anywhere from an 18 gauge to a
23 gauge.
SUSAN J. BALLIET: And how do you decide?
GLENN HAEBERLIN: That's, there is a, uh, pre-screening of
the inmate, basically to inspect what the integrity of his veins
are – if he has bigs, big veins, small veins, it basically is, is
the IV Team's determination as to what the appropriate gauge
would be.
SUSAN J. BALLIET: Do you have any machine that monitors the
consciousness level of the inmate?
GLENN HAEBERLIN: There is an EKG machine that the, that
is attached to the inmate that monitors, that

monitors his
26 cardioelectrical activity.

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1 SUSAN J. BALLIET: Is there anything else?
2 GLENN HAEBERLIN: No, ma'am.
3 SUSAN J. BALLIET: Is there a curtain that, um, is drawn in
4 front of the witnesses?
5 GLENN HAEBERLIN: There are actually, uh, uh, what is, two –
6 one is a long curtain, it – I'm sorry, there's, there's a total
7 of three curtains. There are three witness rooms, uh, one for
8 the designated witnesses that the inmate designates; the center
9 room is occupied by, uh, members of the media, uh, Sheriff,
10 county of conviction, if he chooses to attend, uh, their escorts,
11 Department of (inaudible) staff; and then a third witness room is
12 occupied by, uh, excuse me, by representatives of the victim's
13 family.
14 SUSAN J. BALLIET: Are the curtains drawn in front of
15 all these people during part of, part of the lethal injection
16 procedures?
17 GLENN HAEBERLIN: The curtains are, the curtains are closed

and remain closed until the IVs have been sited and we are
prepared to proceed.
SUSAN J. BALLIET: Are they closed again at any time?
GLENN HAEBERLIN: They are closed at the completion of
injection of the, uh, chemicals and it has, uh, at that point,
uh, there is a, a short time frame that occurs where the doctor
and Coroner entered the, the actual execution, uh, Control Room,
look at the, the, uh, uh, EKG tape. Uh, at the time, uh, they
determine that they want to see the body, the curtains are again

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closed. The physician and Coroner enter, do a, do a, basically
a physical look at the inst-, at the inmate itsel-, or himself,
and, uh, make a determination that the inmate is dead.
At the completion of their inspection, the curtains are
reopened, uh, and that the announcement is made that the inmate
is, or that the sentence has been carried out.
SUSAN J. BALLIET: Why is the mixing of those chemicals and
the siting of the IVs and everything up to the

point where the
9 chemicals are actually pushed, why is all that done behind a
10 curtain, or with the curtain over the witnesses' eyes?
11 GLENN HAEBERLIN: First and foremost is, is protection of
12 the, uh, the integrity of the, the members that participate in
13 the team. Uh, you know, their identities, uh, need to remain
14 secret, uh, and that's the primary reason why it's done.
15 There's, there's enough pressure on the people that are involved
16 in it that, you know, as a secondary, there's enough pressure on
17 them and they don't need the additional pressure of that. Also,
18 that their identities would then become known.
19 SUSAN J. BALLIET: How long before the execution does the
20 condemned get his last meal?
21 GLENN HAEBERLIN: Approximately three hours.
22 SUSAN J. BALLIET: Uh, I only have about six more questions,
23 but I would like for you to tell us what the drugs are that are
24 used in a, in a lethal injection.
25 GLENN HAEBERLIN: Uh, sodium thiopental, uh, pancuronium,
26 uh, bromide, and, uh, potassium chloride.

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SUSAN J. BALLIET: Uh, can you tell us how much sodium thiopental will be used?
GLENN HAEBERLIN: Three grams.
SUSAN J. BALLIET: And what is the purpose of that drug?
GLENN HAEBERLIN: Basically puts the inmate to sleep. Same thing as used in, in most surgeries in the United States.
SUSAN J. BALLIET: Um, and what is the second drug, Pavulon? What is the purpose of the Pavulon?
GLENN HAEBERLIN: I think Pavulon is the brand name; it's pancuronium bromide. Uh, it is basically a paralyzing agent.
SUSAN J. BALLIET: And what's the purpose of that?
GLENN HAEBERLIN: Uh, basically paralyzes the, the, the inmate that's on the gurney.
SUSAN J. BALLIET: Why do you need the inmate to be paralyzed?
GLENN HAEBERLIN: I think the, the primary reason is it suppresses the inmate's breathing.
SUSAN J. BALLIET: Is that the only purpose?
GLENN HAEBERLIN: To my knowledge, yes.
SUSAN J. BALLIET: And what is the purpose

of the potassium
21 chloride?
22 GLENN HAEBERLIN: Potassium chloride, as, as I understand
23 it, basically is, uh, stops the inmate's heart.
24 SUSAN J. BALLIET: Do you know what amount is used of the
25 potassium chloride?
26 GLENN HAEBERLIN: Two hundred and forty milliequivalents.

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1 SUSAN J. BALLIET: And how about the Pavulon, how much of
2 that?
3 GLENN HAEBERLIN: Uh, 50 milligrams.
4 SUSAN J. BALLIET: Why not use two drugs instead of three?
5 GLENN HAEBERLIN: I think the reason that we use three is
6 because that is what has been proven successful in states around
7 the country.
8 SUSAN J. BALLIET: Why those particular three drugs?
9 JEFF MIDDENDORF: Objection. Asked and answered.
10 JUDGE ROGER CRITTENDEN: I'll sustain.
11 SUSAN J. BALLIET: Um, is potassium chloride a paralytic
12 agent?
13 GLENN HAEBERLIN: To my knowledge, it's not.

SUSAN J. BALLIET: Are you familiar with, um, the lethal injection protocol in New Jersey?
GLENN HAEBERLIN: I'm not.
SUSAN J. BALLIET: Are you aware that they use other chemicals and that they do not use pancuronium bromide?
GLENN HAEBERLIN: I, I'm not.
SUSAN J. BALLIET: You mentioned that you spoke with the Tennessee Corrections about lethal injection. Are you aware that they have only carried out one execution by lethal injection, which was about five years ago?
GLENN HAEBERLIN: Uh, I, to be honest, I don't know when they, whether they have done one or whether, or when it was carried out.

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SUSAN J. BALLIET: Um, why did you tell Dr. Hiland to be off the grounds in the event of an execution?
GLENN HAEBERLIN: He, he's, he doesn't need to be there. Part, um, part of the reason for that is, is he is the attending physician of the inmates of our, of my institution. Uh, I don't think there is, re-, removing him removes part

of the perception
that, of any perception that he is involved in any way. He has –
obviously, he has day-to-day duties that, that he has to complete
with every other inmate in the institution.
SUSAN J. BALLIET: I have no further questions.
JUDGE ROGER CRITTENDEN: Mr. Middendorf.
JEFF MIDDENDORF: A few questions, Your Honor. Good
morning, Mr. Haeberlin.
GLENN HAEBERLIN: Good morning.
JEFF MIDDENDORF: I just want to address a few things. You
testified to Ms. Balliet that, uh, the drugs were mixed, are
mixed 12 hours before, or reconstituted. Um, would –did you feel
that – let me ask you this – that's actually two hours before,
is that correct? If I showed you the manual, would that refresh
your recollection, if it was that?
GLENN HAEBERLIN: I, I think I have a copy of it.
JEFF MIDDENDORF: Judge, I have – may I approach?
JUDGE ROGER CRITTENDEN: Yes.
JEFF MIDDENDORF: I'm actually showing him the unredacted
version. This number was given (inaudible) the time before.

26 JUDGE ROGER CRITTENDEN: All right.

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1 JEFF MIDDENDORF: Can you read #6?
2 GLENN HAEBERLIN: "Members of the IV Team shall prepare
3 two sets of execution chemicals in 60cc syringes. The syringes
4 shall be properly labeled and stored in the dispensing tray. The
5 syringes shall be guarded by a member of the Execution Team until
6 they are administered to the condemned."
7 JEFF MIDDENDORF: And what time does that say (inaudible)?
8 GLENN HAEBERLIN: X minus two hours.
9 JEFF MIDDENDORF: Okay. Does that refresh?
10 GLENN HAEBERLIN: Yes.
11 JEFF MIDDENDORF: Okay. I just wanted to clear that up.
12 GLENN HAEBERLIN: I mean, honestly speaking, that's why we
13 have this, because it is difficult to put, redact it to memory,
14 everything that is in it.
15 JEFF MIDDENDORF: How often would you say, leading up to the
16 Bowling execution, did you refer to that Execution Manual?
17 GLENN HAEBERLIN: Well, I, a-, as a matter of our practice,
18 we reviewed the manual on a daily basis at

7:00 each morning. We
19 would reconvene with the, uh, Deputy Wardens and review it again
20 in the afternoon to make sure that the tasks that were, uh, that
21 are basically outlined in the, in the process are completed, and
22 who was responsible and completed those tasks.
23 JEFF MIDDENDORF: Uh, you testified that the two members of
24 the IV Team, one a practicing phlebotomist for the last eight
25 years and one an EMT who's been certified for over 20 years.

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1 Have you ever been involved in the Execution Team process when
2 a new IV Team member wanted to get on that team?
3 GLENN HAEBERLIN: I, I have not, other than, other – I take
4 that back. Uh, there was a retirement that occurred and that was
5 the reason why the, the second person was added, which was the
6 phlebotomist.
7 JEFF MIDDENDORF: In your experience at the Kentucky State
8 Penitentiary, have you ever known a volunteer that wanted to be
9 on the IV Team that, have you ever known

them to come on and they
just, they weren't able to perform the task?
GLENN HAEBERLIN: Um, it's been probably in ninety, probably
sometime in '98, uh, I recall one individual that, uh, just
didn't do a very good job and was – actually he, they left the
team. They didn't remain on the team, but they were part of the
team during the time of the electrocution, but then dropped out
for other reasons. In fact, they retired.
JEFF MIDDENDORF: So being proficient as being able to find
a vein certainly would play into whether they remain an IV Team
member.
GLENN HAEBERLIN: Absolutely.
JEFF MIDDENDORF: Okay. Um, you mentioned that the IV Team
also mixed the – mixes, or reconstitutes, at least the one
chemical, is that correct?
GLENN HAEBERLIN: That's correct.
JEFF MIDDENDORF: Okay. And why do you leave that task to
the IV Team members?

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GLENN HAEBERLIN: They probably at least have some medical
experience in being able to do that.

JEFF MIDDENDORF: Okay. Let's talk about how the drugs are stored. Are they secured in a secure location?

GLENN HAEBERLIN: They, they are secured in the institutional pharmacy, and they are both in locked containers that only I have the key to.

JEFF MIDDENDORF: Okay. Um, then let's move on to the labeling of the drugs once they're administered. When the Executioner, behind that mirror, is sitting there, what is he looking at, he or she?

GLENN HAEBERLIN: He's looking at a tray that contains, uh, eight syringes. Uh, it's basically worked from left to right. There's two, uh, 60cc syringes that are plainly marked, uh, uh, sodium thiopental and the appropriate dosage is 25cc syringe of saline.

JEFF MIDDENDORF: What's the saline used for?

GLENN HAEBERLIN: Basically the saline is used to, uh, it, it is pushed after the first round of, of, of the thiopental to basically make sure that all of the intended dosage gets into the inmate.

JEFF MIDDENDORF: Okay.

GLENN HAEBERLIN: Then there's, then there's a, uh, the, the second one is, uh, the pancuronium bromide that is, uh, it is then pushed, then the saline, and then the, uh, potassium chloride.

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JEFF MIDDENDORF: So the only thing that the person pushing the drugs has to do is start on the left and go to the right.
GLENN HAEBERLIN: Correct.
JEFF MIDDENDORF: One at a time.
GLENN HAEBERLIN: Correct.
JEFF MIDDENDORF: And you also give the ability to choose the size of the catheter to the IV Team?
GLENN HAEBERLIN: Yes.
JEFF MIDDENDORF: And why is that?
GLENN HAEBERLIN: Basically they have far more skills to determine what the appropriate, uh, size should be.
JEFF MIDDENDORF: Who makes the ultimate decision on what arm or what, I guess, tube receives the, the drugs?
GLENN HAEBERLIN: Well, part of what I do during the process of when the inmate is being strapped in and the, and the IVs, or

the, the catheters are being sited, is, uh, I will look for, uh, I guess what's called "blowback." You see, actually, you see blood actually come into the, into the catheter, and then the, there is part of the catheter that's removed, that the actual IV line goes into. What I look for is a, is a sufficient amount of blood. Uh, and in some cases, I'm literally, you see, as the inmate's heart beating, you see blood actually come back out of the catheter. I, I, I, I try to determine in my mind which, which IV site I feel is the best.

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JEFF MIDDENDORF: And, and during an execution prog-, pro-, er, process, you're in communication by what, earpiece, with everybody else?

GLENN HAEBERLIN: Yes, radio and earpiece.

JEFF MIDDENDORF: And you can talk to the person behind the mirror?

GLENN HAEBERLIN: Yes.

JEFF MIDDENDORF: And everybody else, for that matter? Does everyb-, every member of the team –

GLENN HAEBERLIN: Yes.
JEFF MIDDENDORF: – are they in communication? So if there is any problem, you can relay that quickly, and so can anybody else on the team.
GLENN HAEBERLIN: Yes.
JEFF MIDDENDORF: Once you give the order to proceed to push the drugs, what are you looking for when you know that the drugs are flowing?
GLENN HAEBERLIN: Uh, I'm, I'm observing wherever the, the catheter site is, I'm looking for any leakage there or the possibility that the catheter comes out, uh –
JEFF MIDDENDORF: What would you do in that case?
GLENN HAEBERLIN: Would, uh, call the Control Center, or the, actually the Executioner, Chamber, and say they needed to switch to another one, that there was a problem.
JEFF MIDDENDORF: Okay, what else are you looking for?

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GLENN HAEBERLIN: And, in, in, in all honesty, if, if there was a blowout as far as the catheter being, coming out of the

inserted, they would know it because of – number one, they could see it; number two, uh, they could certainly tell the difference in the resistance of the, of the, the, uh, syringe that's being pushed. So basically we tell them to go to the other line.

JEFF MIDDENDORF: (Inaudible) Are you also looking for swelling at the IV site?

GLENN HAEBERLIN: Yes.

JEFF MIDDENDORF: Okay. If, if you notice swelling, what would you do in that situation?

GLENN HAEBERLIN: Would basically call them and say that there is a, a potential problem and switch to the other arm.

JEFF MIDDENDORF: What else are you looking for once you've set to proceed?

GLENN HAEBERLIN: Uh, basically looking for him to go to sleep.

JEFF MIDDENDORF: Okay. Are you also looking at the lines during an execution?

GLENN HAEBERLIN: Yes.

JEFF MIDDENDORF: What if you noticed any fluid on the ground?

GLENN HAEBERLIN: Uh, I would try to determine if that was

something that was spilled prior to or there was an actual leak in the line itself.

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JEFF MIDDENDORF: Okay. And, and what would you do in that situation?

GLENN HAEBERLIN: If there was a, a, determined to be a leak in the line, then I would command them to, to switch to another, the other side.

JEFF MIDDENDORF: Let's talk about the training that you all do on a monthly basis. Um, what is consisting of that training?

GLENN HAEBERLIN: Uh, what we do is, we have a member of the team – excuse me – a, a member of the team basically plays the role of the, uh, condemned inmate. Uh, he is placed in the cell. Uh, he is, uh, basically removed from the cell. He, uh, goes into the Execution Chamber, plays the role of an inmate. He lays down on the gurney. He is strapped to the gurney and then the IV Team sites, uh, two IVs into him.

JEFF MIDDENDORF: During some of those trainings, do you ever have –

GLENN HAEBERLIN: I'm sorry, they incite – they insert two catheters. He is not connected to an IV or a, or a saline drip, or anything else.

JEFF MIDDENDORF: Okay. During those trainings, do you ever tell one of the volunteers to struggle some?

GLENN HAEBERLIN: We, we practice a resistant inmate, yes.

JEFF MIDDENDORF: Okay. And IVs are actually inserted during each one of those practices?

GLENN HAEBERLIN: Catheters.

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JEFF MIDDENDORF: Catheters, I apologize. You're correct (inaudible). Um, since, since 1998, would you say that you've been involved in, in some fashion, on the Execution Team since that period of time, or been around the practices?

GLENN HAEBERLIN: Yes.

JEFF MIDDENDORF: Since that time, have you ever, or can you recall an occasion when the IV Team has not been able to site a catheter?

GLENN HAEBERLIN: Uh, well, I mean, we're, we're talking about probably a seven-year period here. But

to my recollection,
no.
JEFF MIDDENDORF: So they have always been able to do one as
far as your recollection?
GLENN HAEBERLIN: To include two on me.
JEFF MIDDENDORF: Okay. You were present during the Harper
execution, is that correct?
GLENN HAEBERLIN: I was.
JEFF MIDDENDORF: Okay. Um, how long, in your opinion, did,
did it take for him to become unconscious?
GLENN HAEBERLIN: Fifteen to 20 seconds.
JEFF MIDDENDORF: And you noticed no other movement after
that?
GLENN HAEBERLIN: Other, other than, I think I testified
earlier that as, there was a, a brief licking of the lips and a,
and one of his big toes moved, and other than that, there was
absolutely no other movement whatsoever.

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JEFF MIDDENDORF: Can I have one second, Your Honor?
JUDGE ROGER CRITTENDEN: Yes.
JEFF MIDDENDORF: Just, just a, a couple questions. Uh, I
know you've gone through this quite a bit. Um, how long would

you say it takes to push the sodium thiopental?
GLENN HAEBERLIN: Probably no more than two minutes, two to three minutes.
JEFF MIDDENDORF: Okay, uh, did you notice any movement after that two or three minutes?
GLENN HAEBERLIN: None whatsoever. Uh, I, you know, after the first 20, 25 seconds, there was absolutely no movement whatsoever, from – from there until the point where he was declared dead.
JEFF MIDDENDORF: Okay. I don't have any further questions.
JUDGE ROGER CRITTENDEN: Ms. Balliet.
SUSAN J. BALLIET: Just a moment, please. Warden Haeberlin, what happens if thiopental and pancuronium bromide come into contact with each other?
GLENN HAEBERLIN: I don't know the answer to that.
SUSAN J. BALLIET: Have you ever –
GLENN HAEBERLIN: Are you – are you talking about prior to entering the body, or after entering the body?
SUSAN J. BALLIET: Either way, assuming – if, for instance, something went wrong with the saline and the sodium thiopental and the pancuronium were injected too quickly, one right after

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another, and they mixed, what – are you aware that they would crystallize?

GLENN HAEBERLIN: I, I am not aware of that.

SUSAN J. BALLIET: And are you aware what would happen if the pancuronium came into contact with the potassium chloride, if the saline wasn't enough, or if somehow those two –

GLENN HAEBERLIN: I, I don't know the answer to that, I'm sorry.

SUSAN J. BALLIET: And so you're not aware of that. Um, what happens if, uh, the IV Team chooses a catheter that's too big or too small?

GLENN HAEBERLIN: I, I mean, I don't know – I don't know what you're specifically asking for here.

SUSAN J. BALLIET: If, if you know, um, you can answer. If you don't know that, you can say you're not aware.

GLENN HAEBERLIN: Well, uh, I'm not aware. I, that, that's, I mean, that's part of the reason why the inmate is observed and looked at or inspected by the team for integrity

veins and a
19 determination is, from that is made as to what the appropriate
20 size catheter may be. But if, if – that doesn't mean you can't
21 insert a small catheter into a large vein and it still won't
22 be successful. It's just going to take – it would, it would
23 ultimately take longer for the drugs to enter the body.
24 SUSAN J. BALLIET: Um, are you aware of what would happen if
25 the chemical went into the muscle or the tissue rather than the
26 vein?

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1 GLENN HAEBERLIN: It would – I guess my indication is, is
2 that's, there would probably be some swelling in the site because
3 it's not actually going into the, uh, the, the system of veins
4 and would be actually going somewhere under the skin or into the
5 muscle. And that's one of the reasons why we look for swelling
6 at the site.
7 SUSAN J. BALLIET: Um, are you aware what would happen if
8 you, if you got the first chemical in the body and then you had

problems with the lines leaking at that point?
GLENN HAEBERLIN: We would switch to a second line.
SUSAN J. BALLIET: What if both lines were bad?
GLENN HAEBERLIN: At that point in time, we'd probably have to stop and re-site a second, or, or an additional catheter.
SUSAN J. BALLIET: Are you equipped to site a third catheter?
GLENN HAEBERLIN: Yes.
SUSAN J. BALLIET: The one individual IV Team member that left, um, did that person leave because they dropped off voluntarily and retired, or was that person, uh, asked to leave the team?
GLENN HAEBERLIN: They dropped off voluntarily.
SUSAN J. BALLIET: Can you tell the difference between someone who's asleep and someone's paralyzed?
GLENN HAEBERLIN: I don't know the answer to that. I mean, I, I, am, am I, am I a doctor and can stand and look at somebody and tell the difference? Probably not.

SUSAN J. BALLIET: (Inaudible)
GLENN HAEBERLIN: Other than the experience that I had in the car – in the Harper case to say because of the times that were involved in the injection of the, uh, sodium thiopental, it was my observation that he was asleep. I mean, it, it's, it almost equates to what you see on TV in surgery. When you count back from a hundred, you get to about 98, and you're asleep. I mean, that, that's what I observed.
SUSAN J. BALLIET: How – how do you know that he was unconscious rather than consciously paralyzed?
JEFF MIDDENDORF: Objection, Judge. I think he just answered that.
JUDGE ROGER CRITTENDEN: Sustained. I'll sustain the objection.
SUSAN J. BALLIET: You say that he appeared to be asleep after 15 to 20 seconds. Um, did – you said that – also that his lips – he licked his lips and his toe moved. When did those two events occur?
GLENN HAEBERLIN: Probably within the first five seconds of, uh, the flow of sodium thi.

SUSAN J. BALLIET: Were those both within the 20 – 15 to
20 seconds?
GLENN HAEBERLIN: Way at the beginning.
SUSAN J. BALLIET: What – what would happen if you tried to
insert two IVs but you could only get one in?

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GLENN HAEBERLIN: That would be a call that I would have to
make based on the integrity of the first one, to see whether or
not we would proceed. It would be my preference, and it would –
the, the, the, we're – we're not on a time frame and a rush here
to do anything. The, the goal is to get two. Uh, my experience
has been, with the team that we have, that we have always been
able to get two.
SUSAN J. BALLIET: Then what would happen if only one line
started to leak?
GLENN HAEBERLIN: We'd go to the second line.
SUSAN J. BALLIET: Why did it take only three minutes
between the injected Pavulon and the potassium chloride in
Harper?
GLENN HAEBERLIN: Because that's how

long it took to, to
15 enter it into the body.
16 SUSAN J. BALLIET: Almost done. How long would it take to
17 site a new IV line if both the lines were leaking?
18 GLENN HAEBERLIN: Five to seven minutes.
19 JUDGE ROGER CRITTENDEN: Okay, Mr. Middendorf, anything
20 further?
21 JEFF MIDDENDORF: No. No, Your Honor.
22 JUDGE ROGER CRITTENDEN: Thank you, Warden. You can step
23 down.

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16 SUSAN J. BALLIET: Deputy Pershing, could you state your
17 name and spell your last name for the record, please?
18 RICHARD PERSHING: Richard Pershing, P-E-R-S-H-I-N-G.
19 SUSAN J. BALLIET: Where are you currently employed?
20 RICHARD PERSHING: Kentucky State Penitentiary.
21 SUSAN J. BALLIET: How long have you worked there?
22 RICHARD PERSHING: Be 31 years this July.
23 SUSAN J. BALLIET: And what is your current position there?
24 RICHARD PERSHING: Deputy Warden of

Security.
25 SUSAN J. BALLIET: And what are your duties in that regard?

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1 RICHARD PERSHING: Uh, I am over the security of the uniform
2 staff, which is about 260 of the employees that work at the
3 institution.
4 SUSAN J. BALLIET: How long have you been in that position?
5 RICHARD PERSHING: Since July of last year.
6 SUSAN J. BALLIET: Um, are you responsible for training?
7 RICHARD PERSHING: Part, yes, ma'am. Part of my job is
8 seeing that my staff are – receive the proper training each year.
9 SUSAN J. BALLIET: Does any of that training involve lethal
10 injections?
11 RICHARD PERSHING: As far as my staff goes, no.
12 SUSAN J. BALLIET: As far as anyone else?
13 RICHARD PERSHING: Uh, myself. I am involved in, in
14 training lethal injections, beings I'm part of the team.
15 SUSAN J. BALLIET: And what are your responsibilities in a
16 Lethal injection execution?
17 RICHARD PERSHING: I am with the Warden

inside the chamber
during the process of a lethal injection.
SUSAN J. BALLIET: When you say "inside the chamber," do you
mean inside the room with the condemned inmate?
RICHARD PERSHING: Yes, ma'am.
SUSAN J. BALLIET: Have you ever seen a lethal injection
carried out?
RICHARD PERSHING: No, ma'am.
SUSAN J. BALLIET: Did you have any role within the prison
during the execution of Edward Harper?

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RICHARD PERSHING: Yes, ma'am.
SUSAN J. BALLIET: And what was that role?
RICHARD PERSHING: I was CERT Team Commander then, and I was
responsible for security inside and outside of the institution
while the process was going on.
SUSAN J. BALLIET: Did you say "CERT Team"?
RICHARD PERSHING: CERT Team, the emergency response team.
SUSAN J. BALLIET: And what kind of emergencies do they
respond to?
RICHARD PERSHING: Anything the Warden deems necessary,
whether it's escape, riot, any kind of

disturbance.
SUSAN J. BALLIET: So this is a, an armed team –
RICHARD PERSHING: Yes.
SUSAN J. BALLIET: A security team?
RICHARD PERSHING: Yes, ma'am. Every institution in, in the system has a response team.
SUSAN J. BALLIET: Okay. Did you have any role as part of the actual lethal injection of Edward Harper?
RICHARD PERSHING: No, ma'am.
SUSAN J. BALLIET: Did you, uh, oversee mixing the chemicals?
RICHARD PERSHING: No, ma'am.
SUSAN J. BALLIET: You were not involved in that at all?
RICHARD PERSHING: No, ma'am
SUSAN J. BALLIET: Did you witness the execution of Harper?
RICHARD PERSHING: No, ma'am.

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SUSAN J. BALLIET: Uh, apart from security, did you play any role at all with that execution?
RICHARD PERSHING: No, ma'am.
JEFF MIDDENDORF: Asked and answered several times, Your Honor. I object.
JUDGE ROGER CRITTENDEN: All right. Let's, let's move on.

Go ahead.
SUSAN J. BALLIET: Were you involved in the adoption of
lethal injection?
RICHARD PERSHING: No, ma'am.
SUSAN J. BALLIET: So you didn't – you had, you had no
discussions with anybody regarding the institution of that
execution procedure?
RICHARD PERSHING: No, ma'am.
SUSAN J. BALLIET: Have you ever traveled to any other state
for training on lethal injection?
RICHARD PERSHING: No, ma'am.
SUSAN J. BALLIET: Have you ever reviewed any other state's
protocols on lethal injection?
RICHARD PERSHING: No, ma'am.
SUSAN J. BALLIET: When was the first time you looked at
Kentucky's lethal injection protocol?
RICHARD PERSHING: The earliest, when, in July of last year,
after I was promoted.
SUSAN J. BALLIET: And why – why then?

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RICHARD PERSHING: Because I now became a member of the
team.
SUSAN J. BALLIET: Do you recall what chemicals are used in

Kentucky's lethal injection protocol?
RICHARD PERSHING: Let's see, the first chemical is, uh –
JEFF MIDDENDORF: Let me, let me ask the purpose of this.
Um, he, he says he's not a – he has nothing to do with the IV
Team. He's, he's in charge of security. Is there a reason that
he needs to know the chemicals?
SUSAN J. BALLIET: Well, Your Honor, we're just trying to
establish that really –
JUDGE ROGER CRITTENDEN: I mean, we've established what the
chemicals are. I don't think there's any question about that.
SUSAN J. BALLIET: What I'm trying to establish is the lack
of knowledge of the people who are involved in the execution as
to the important details of what's involved in the execution.
JEFF MIDDENDORF: Well, what they're trying to establish is
making people look bad, Judge.
JUDGE ROGER CRITTENDEN: I'm going to sustain the – I'm
going, I'm, I'm, I'm going to sustain the objection to this line
of questioning. I think as far as what, what Warden Pershing is
in charge of, if, if it relates to the execution, that he's in

charge of, then you can ask that, as, as it relates to what
this suit is about. But just to bring everyone in from the
institution to indicate that they don't – they may or may not
know everything that goes on, it's just not really relevant.

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SUSAN J. BALLIET: Um, are you aware of the revisions that
have been made to the protocol in December of 2004?
RICHARD PERSHING: Yes, ma'am.
SUSAN J. BALLIET: Uh, which of those revisions affect what
you do?
RICHARD PERSHING: The crash cart that may be brought in,
uh, if there is a stay after the process is started, that will
come into the chamber where we are at, so that, that was added.
Uh –
SUSAN J. BALLIET: Were you involved in deciding whether to
have the crash cart there?
RICHARD PERSHING: No, ma'am.
SUSAN J. BALLIET: Have you seen the crash cart?
RICHARD PERSHING: No, ma'am.
SUSAN J. BALLIET: Do you know what

equipment is included on
it?
RICHARD PERSHING: Um, the one thing I do know is there is a
defibrillator on there to, to shock the individual, to bring him
back, if that was, that part is needed.
SUSAN J. BALLIET: What role will you play with regard to
the crash cart?
RICHARD PERSHING: None. The medical team that, the team
itself outside the room, uh, will be the ones that come in and,
and do that.
SUSAN J. BALLIET: Will you be with them?

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RICHARD PERSHING: I will probably still be in the room
unless I'm in the way, and then I'll get out of the way.
SUSAN J. BALLIET: So, oh, you said that you had a role with
regard to the crash cart and I'm, I'm not really understanding
what your role is. Can you –
RICHARD PERSHING: Well, that was you –
SUSAN J. BALLIET: – tell –
RICHARD PERSHING: – you asked me what I, what I knew about
what changes were made, and that crash cart was something that is

changed and it would be brought into the chamber if needed there
in that critical part, if there was a stay. And I am already in
the room, so I'm part of that.
SUSAN J. BALLIET: I see. But you're not responsible for
bringing it into the room.
RICHARD PERSHING: No, ma'am.
SUSAN J. BALLIET: All right. Um, were you involved at all
in the change from two to three grams of sodium thiopental?
RICHARD PERSHING: No, ma'am.
SUSAN J. BALLIET: What do you do when you're in the
Execution Chamber with the, with a condemned inmate?
RICHARD PERSHING: Okay. When the condemned inmate is
brought in, then they secured into the, onto the gurney, and then
once all that's completed and IVs are, are sited and, uh, we're
ready to go, then Warden will have me open the curtains and turn
on the PA system, and then the Warden will proceed with the
beginning of the legal execution. Uh, he will ask the condemned

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if he has any last statement. Uh, he will give

his statement
2 if he chose to, so chooses. Uh, the Warden will then say,
3 "Proceed." Uh, and after that point, I will turn the PA system
4 off. Uh, this process will continue on.
5 Uh, at a point in time when they're going to bring, uh, the
6 doctor in to check the condemned, at the end of the process, I'll
7 shut the curtains back. Uh, doctor will come in, then I'll –
8 after he leaves – I'll open the curtains back up, turn the PA
9 system back on, and then the Warden will announce that, uh, the
10 process has been completed, the date and time and so forth.
11 SUSAN J. BALLIET: What knowledge do you have about
12 anesthesia awareness?
13 RICHARD PERSHING: None.
14 SUSAN J. BALLIET: If a vein could not be sited, if there
15 was some problem that arose, what role would you play?
16 RICHARD PERSHING: If the vein is not sited within one
17 hour, then the Commissioner is notified and he would notify the
18 Governor's office, and a decision would be made how to proceed
19 from there.
20 SUSAN J. BALLIET: Are there any other

problems that could
21 arise that, if they did arise, you would have a role to play?
22 JEFF MIDDENDORF: Your, Your Honor, I object to the breadth
23 of that question. It calls –
24 JUDGE ROGER CRITTENDEN: I'll sustain.
25 MALE VOICE: – for speculation.

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1 JUDGE ROGER CRITTENDEN: I'll, I'll sustain this to what other
2 problems could or possibly arise. If you want to go into
3 specifics, that's fine.
4 SUSAN J. BALLIET: If the lines started leaking, would you
5 have a role that you would play?
6 RICHARD PERSHING: I will be watching the line. Me and
7 the Warden will both be watching IV lines, see if there are
8 swellings, see if there's any leaking that, that's taking place.
9 SUSAN J. BALLIET: And what would you do if that was
10 happening?
11 RICHARD PERSHING: Notify the IV Team.
12 SUSAN J. BALLIET: What options would be available at that
13 point?
14 RICHARD PERSHING: They can switch to the second sited line.

SUSAN J. BALLIET: And who decides what option to use?
RICHARD PERSHING: That would be between the Warden and the,
uh, IV Team.
SUSAN J. BALLIET: Uh, would the General Counsel be involved
in that?
RICHARD PERSHING: Only if the process would be stopped and
we would have to leave the chamber for some kind of consultation.
I would say that would be after the hour siting the line.
SUSAN J. BALLIET: I have no further questions.
JUDGE ROGER CRITTENDEN: Mr. Middendorf?
JEFF MIDDENDORF: Just real quickly, Judge. You indicated
that once the, uh, I guess the command to proceed takes place,

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tell us exactly what you're looking for during those, those few
minutes right after that.

RICHARD PERSHING: I'll be looking for the, the sited line that we are using, whether it's – whichever one has been identified as the primary. And if there's any swelling in that area, if there's any leakage in that area, and –

JEFF MIDDENDORF: Are you also watching the lines?

RICHARD PERSHING: I, I'm watching the lines themselves.

JEFF MIDDENDORF: And if you saw any leakage in either that, or the swelling, you would notify the Warden?

RICHARD PERSHING: I'd notify the Warden.

JEFF MIDDENDORF: And is it an accurate – is it an accurate statement to say that you all are in contact during that time, communication-wise?

RICHARD PERSHING: We have voice-activated headsets on.

JEFF MIDDENDORF: Okay. And you can also hear the Executioners behind the mirror?

RICHARD PERSHING: Yes, sir.

JEFF MIDDENDORF: So if they have any problem, that would be communicated to you and the Warden, as well?

RICHARD PERSHING: Yes, sir.

JEFF MIDDENDORF: That's all I have, Judge.

JUDGE ROGER CRITTENDEN: Anything further?

SUSAN J. BALLIET: One moment, please. Would you be able to see if the line was leaking from outside the room where you are?

RICHARD PERSHING: I'm the inside the room, ma'am.

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SUSAN J. BALLIET: Well, there's, as I understand it, two rooms. From the exe-, you're not in the Execution Chamber itself?

RICHARD PERSHING: Yes. Me and the Warden are in there with the condemned while the process is going on.

SUSAN J. BALLIET: Okay, but then you're not in the Control Room.

RICHARD PERSHING: No, ma'am.

SUSAN J. BALLIET: If there was leaking in the Control Room, you wouldn't be able –

RICHARD PERSHING: I'm not in the Control Room and I cannot see in there.

SUSAN J. BALLIET: That's right. Um, have you ever seen swelling from an improper IV line?

RICHARD PERSHING: No, ma'am.

SUSAN J. BALLIET: So you, um. Thank you. I have no other questions.

JEFF MIDDENDORF: No questions, Judge.

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THEODORE S. SHOUSE: Good morning, doctor.
STEVE HILAND: Good morning, sir.
THEODORE S. SHOUSE: Would you please state your name and spell your last name for the record?
STEVE HILAND: Steve Hiland, H-I-L-A-N-D.
JUDGE ROGER CRITTENDEN: H-I-L-A-N-D?
STEVE HILAND: Yes.
JUDGE ROGER CRITTENDEN: I believe you're going to have to speak up a little bit.
STEVE HILAND: I'm sorry. I'm, I'm -
THEODORE S. SHOUSE: I'm deaf in my left ear, and so if you could just speak up a little, I'd appreciate it.
JUDGE ROGER CRITTENDEN: The first time I've heard him admit that.
THEODORE S. SHOUSE: Okay?
STEVE HILAND: Okay.
THEODORE S. SHOUSE: All right. How are you employed, Mr. Hiland?
STEVE HILAND: I'm a physician.
THEODORE S. SHOUSE: And, uh, where do you work?
STEVE HILAND: I work for the, uh, Department of Corrections at Kentucky, Kentucky State Penitentiary.

THEODORE S. SHOUSE: Okay. At Eddyville?
STEVE HILAND: Yes.
THEODORE S. SHOUSE: All right. Who's your direct superior?
STEVE HILAND: Uh, Warden Haeberlin.

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THEODORE S. SHOUSE: Okay. Who's your medical superior?
STEVE HILAND: Dr. Scott Haas.
THEODORE S. SHOUSE: Scott Haas. And what is his title?
STEVE HILAND: He's the Medical Director for the Department of Corrections.
THEODORE S. SHOUSE: Okay. Are you sometimes referred to as the Medical Director of the Penitentiary?
STEVE HILAND: Yes.
THEODORE S. SHOUSE: I mean, your, what is your exact title?
STEVE HILAND: I'm the, uh, Medical Authority for the Penitentiary.
THEODORE S. SHOUSE: Okay. But sometimes that's used interchangeably with "Medical Director"?
STEVE HILAND: Yes, it is.
THEODORE S. SHOUSE: Okay. I just wanted to – that may come up in a little bit. How long have you been licensed to practice medicine, doctor?

STEVE HILAND: Since 1973.
THEODORE S. SHOUSE: Okay. Do you carry any Board certifications?
STEVE HILAND: No, I don't.
THEODORE S. SHOUSE: Okay. And I may have already asked you this, but how long did you say you've been working at the Penitentiary?
STEVE HILAND: I have worked, uh, Kentucky State Penitentiary since 1992.

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THEODORE S. SHOUSE: So, 13, we're in our, we're in your 13th year?
STEVE HILAND: Yes.
THEODORE S. SHOUSE: Okay. Do you have any training in anesthesiology at all?
STEVE HILAND: No.
THEODORE S. SHOUSE: Okay. Okay. You're probably aware – if you weren't aware as part of your duties, you've probably become aware, that in December of last year changes were made to Kentucky's protocol for how to conduct an execution by lethal injection. Are you aware of that?
STEVE HILAND: Yes.

13 THEODORE S. SHOUSE: Okay. How did you become aware of
14 those changes?
15 STEVE HILAND: Uh, I'm not really sure – perhaps the
16 newspaper, perhaps from speaking with people at the Penitentiary.
17 Uh, I can't give you a, uh, specific answer on that.
18 THEODORE S. SHOUSE: Okay. Did anyone from the Department
19 of Corrections consult you on, uh, the efficacy of any changes to
20 the protocol?
21 STEVE HILAND: No. Um, I'm not sure what you're talking
22 about. Sorry.
23 THEODORE S. SHOUSE: Okay, that's fine. Have you ever
24 talked to anyone within the Department about the execution
25 protocol used here in Kentucky?

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1 STEVE HILAND: Indirectly, perhaps. I'm, I'm not really
2 sure, really, of the question.
3 THEODORE S. SHOUSE: Okay. Has anyone ever asked you your
4 opinion on any proposed changes to the protocol?
5 STEVE HILAND: No.
6 THEODORE S. SHOUSE: Okay. Have you

and Warden Haeberlin
ever discussed, um, anything at all about the protocol – how it
works, how it might not work?
STEVE HILAND: No.
THEODORE S. SHOUSE: All right. Have you and Dr. Haas ever
had any discussions like that?
STEVE HILAND: No.
THEODORE S. SHOUSE: Okay. Has anybody within the
Department of Corrections ever asked you to be responsible for
ordering the drugs that might be used in a lethal injection?
STEVE HILAND: No.
THEODORE S. SHOUSE: Okay, that's what I'm getting at. Have
you ever even seen the protocol? Other than portions you were
showed at your deposition, have you ever even seen the protocol?
STEVE HILAND: No.
THEODORE S. SHOUSE: That's all I'm trying to nail down. If
you didn't see it at the deposition, you've never seen it.
STEVE HILAND: Right.
THEODORE S. SHOUSE: Okay. Can you tell me what drugs are
used in a lethal injection here in Kentucky?
STEVE HILAND: Uh, sodium pi-, thiopental –

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THEODORE S. SHOUSE: Okay.
STEVE HILAND: – pancuronium bromide, and potassium chloride.
THEODORE S. SHOUSE: All right. Let me ask you a question about one of those. Is potassium chloride a paralytic?
STEVE HILAND: No.
THEODORE S. SHOUSE: So, what does potassium chloride do? What's its therapeutic use?
STEVE HILAND: Its therapeutic use is to replace potassium lost through some means.
THEODORE S. SHOUSE: Okay. Would an overdose of potassium chloride cause death?
STEVE HILAND: Yes.
THEODORE S. SHOUSE: Okay. Would that drug be painful while it was being injected?
STEVE HILAND: It would depend on the concentration and how rapidly it was injected.
THEODORE S. SHOUSE: Okay. Would it burn when injected?
STEVE HILAND: That is the feeling of pain that would be noticed if it were heavily concentrated or, or, or pushed very

quickly, yes.
THEODORE S. SHOUSE: Okay. Would it burn a lot?
STEVE HILAND: I don't know.
THEODORE S. SHOUSE: You don't know? Okay, just one second.
Do you recall on, um, January the 5th of this year, I came down
and deposed you?

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STEVE HILAND: Yes.
THEODORE S. SHOUSE: Okay. I'd like to show you a part of
that deposition, please. And you remember that, uh, that some of
these gentlemen were there?
STEVE HILAND: Yes.
THEODORE S. SHOUSE: Okay. I have a transcript of that
Deposition.
(Inaudible/mixed and muffled voices)
THEODORE S. SHOUSE: We'll just leave this one together.
How does that sound?
STEVE HILAND: Okay.
THEODORE S. SHOUSE: Okay. I'm Shouse and you're Hiland in
this, okay? Do you see here where I ask you, "Would potassium
chloride" – first of all, "Do you know what amount is used, uh,
in the conduct of an execution?" And you

respond –
STEVE HILAND: "I do not. I'm not sure. It's a large
amount."
THEODORE S. SHOUSE: Okay. And then I say, "Okay. Do you,
uh, what would a large amount of potassium chloride feel like if
it were injected into you, uh, while you were conscious?"
STEVE HILAND: "It would burn."
THEODORE S. SHOUSE: And then I say, "How severely?"
STEVE HILAND: "Quite."
THEODORE S. SHOUSE: Okay. So it would burn quite severely?
STEVE HILAND: Yes.

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THEODORE S. SHOUSE: Okay. (Coughing) Excuse me, doctor,
I'm not feeling well today, so. Okay. Do you know why those
three drugs you just listed are used in the conduct of an
execution by lethal injection here in Kentucky?
STEVE HILAND: I don't know why those three in particular
were picked, no.
THEODORE S. SHOUSE: Okay. Do you know why saline is
injected between each of the three drugs?
STEVE HILAND: I do not.

THEODORE S. SHOUSE: Okay. Is that something you think you would know as a doctor?
STEVE HILAND: Yes.
THEODORE S. SHOUSE: Okay. Now, are you aware of something called "conscious paralysis" or "anesthesia awareness"?
STEVE HILAND: Yes.
THEODORE S. SHOUSE: Okay. What is that?
STEVE HILAND: That would be where you would be paralyzed, But still conscious or awake.
THEODORE S. SHOUSE: Okay. So trapped in your body?
STEVE HILAND: Yes.
THEODORE S. SHOUSE: All right. Now, are you aware, um, okay – what is sodium thiopental? Let's back up a minute.
STEVE HILAND: It, it's an anesthetic agent used to render You unconscious.
THEODORE S. SHOUSE: Okay. Are you aware of any ways to monitor or to determine whether or not a patient who has been

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administered sodium thiopental is, in fact, in a state of anesthesia
STEVE HILAND: You would lose your what's

called corneal
reflex when you are in a, a satisfactory state of anesthesia,
yes.
THEODORE S. SHOUSE: Okay. How would you test for that?
STEVE HILAND: Which we would touch the cornea on the eye,
See if the, uh, muscle responds in the eye.
THEODORE S. SHOUSE: Okay. So that would be simply – but I
don't want to put words in your mouth – you tell me. How, how
would you go about doing that?
STEVE HILAND: I wouldn't do that.
THEODORE S. SHOUSE: Okay. Why not?
STEVE HILAND: An, an anesthesiologist –
THEODORE S. SHOUSE: Judge, I apologize. I can't hear any
of this.
STEVE HILAND: I'm sorry. I, I would not do that. An anes-
– anesthesiologist would do that. I've been instructed that's
what they do.
THEODORE S. SHOUSE: Okay. But let me ask, how would one
conduct this test?
STEVE HILAND: By touching the eye.
THEODORE S. SHOUSE: Okay. Raising the eyelid?
STEVE HILAND: Yes.
THEODORE S. SHOUSE: And touching the eye?

26 STEVE HILAND: Yes.

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1 THEODORE S. SHOUSE: And what would you expect to see?
2 STEVE HILAND: You wouldn't expect to see any reflex in the,
3 um, iris of the eye.
4 THEODORE S. SHOUSE: Okay. What is, um, pancuronium
5 bromide, also known as Pavulon? What does that do to the body?
6 STEVE HILAND: It is a paralytic agent, is neuromuscular
7 blocking agent.
8 THEODORE S. SHOUSE: Okay. So if you're under the effects
9 of that, will this reflex that you just described – raising the
10 eyelid and touching the eye – will that work if you're paralyzed
11 by Pavulon?
12 STEVE HILAND: I wouldn't think so, no.

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1 JEFF MIDDENDORF: Doctor, you wouldn't consider an execution
2 a medical procedure, would you?
3 STEVE HILAND: No, I would not.
4 JEFF MIDDENDORF: Okay. Um, is sodium thiopental a commonly
5 Used drug –

STEVE HILAND: Yes.
JEFF MIDDENDORF: – in hospitals across this country?
STEVE HILAND: Yes, it is.
JEFF MIDDENDORF: Okay. Is, uh, what, a drug that would act as a paralytic agent, like pancuronium bromide, is that also a commonly used drug across hospitals?
STEVE HILAND: Yes, it is.
JEFF MIDDENDORF: Okay. What about potassium chloride? Is that a commonly used drug in hospitals across this country?
STEVE HILAND: Yes, it is.
JEFF MIDDENDORF: If an in- – in your opinion, if an individual were given three grams of sodium thiopental, would you agree that that individual would be unconscious for a significant period of time?
STEVE HILAND: Yes, I would.
JEFF MIDDENDORF: Now, is it, would it be a true statement that phlebotomists often train medical residents because those are the individuals that have the, the most experience in, in finding an IV line?
STEVE HILAND: Is – yes.
JEFF MIDDENDORF: Or finding an IV. I'm sorry.

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STEVE HILAND: Yes.
JEFF MIDDENDORF: Um, in fact, many hospitals also have IV technicians or phlebotomist technicians on their staff. Is that a fair statement?
STEVE HILAND: Correct.
JEFF MIDDENDORF: What is infiltration?
STEVE HILAND: Infiltration, uh, in refer- – in referring to an IV line, would be where the vein has been ruptured on, um, where the needle has come out of the vein, and the contents of the IV line infiltrate are (inaudible) or move into the tissues around the site.
JEFF MIDDENDORF: Okay. And, and you're familiar with the drugs we use, as you have testified, is that correct, in an execution?
STEVE HILAND: Yes.
JEFF MIDDENDORF: And it's a, it's a fairly large volume of drugs, is that correct?
STEVE HILAND: Yes, it would be.
JEFF MIDDENDORF: Uh, would you be able to notice a swelling if, if the IV was not inserted into a vein?
STEVE HILAND: Yes.

Nurse Hiland
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THEODORE S. SHOUSE: Okay. Um, how many IVs do you think you've started in your career?

CHANIN HILAND: Probably between, uh, 10 or 20.

THEODORE S. SHOUSE: Ten and twenty?

CHANIN HILAND: Um-hm [yes].

THEODORE S. SHOUSE: Okay. Um, how do you handle, in your ca- first of all, how long have you been at the Penitentiary?

CHANIN HILAND: Since 2002.

THEODORE S. SHOUSE: Okay.

CHANIN HILAND: Three years.

THEODORE S. SHOUSE: Okay. Within the, within your practice at, in the Penitentiary, how do you normally handle not being able to find a vein? What would you do?

CHANIN HILAND: Um, well, generally, my rule of thumb is, uh, you try to stick three times. If you don't get the vein after the third time, you go get someone else, another nurse –

THEODORE S. SHOUSE: Okay.

CHANIN HILAND: – to come and see if they can.

THEODORE S. SHOUSE: Okay. Now, let me ask you this. When

you're injecting drugs either into a, say into an IV line into a
patient, okay? Um, there are different rates at which different
drugs should be injected, is that correct?
CHANIN HILAND: That's correct.

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THEODORE S. SHOUSE: Okay. Um, Drug X has a different rate
of injection than Drug B.
CHANIN HILAND: Right.
THEODORE S. SHOUSE: And, um, how do you know what the rate
is? I mean, you can't walk around with all that in your head.
CHANIN HILAND: No, there are, there are handbooks that we
use that tell how fast you can push something into an IV.
THEODORE S. SHOUSE: Okay. So if you were injecting
something you weren't familiar with, what would you do?
CHANIN HILAND: I would look it up.
THEODORE S. SHOUSE: Look it up?
CHANIN HILAND: Um-hm [yes].
THEODORE S. SHOUSE: And it would tell you what the rate is?
CHANIN HILAND: Right.
THEODORE S. SHOUSE: And then what would you do to make sure
you knew you were doing it at the right rate?

CHANIN HILAND: Usually it's so many cc's over a minute or
30 seconds, and you, you time it.
THEODORE S. SHOUSE: You use your wristwatch?
CHANIN HILAND: Yes.

* * * *

Dr. Haas
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MALE VOICE: Judge.
JUDGE ROGER CRITTENDEN: Yes.
MALE VOICE: We're trying to find Mr. Smith.
JUDGE ROGER CRITTENDEN: All right. Well, we're going to go
on.
MALE VOICE: Okay.

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JUDGE ROGER CRITTENDEN: And I think you can, you can inform
Mr. Smith of what's going on.
MALE VOICE: Okay.
JUDGE ROGER CRITTENDEN: Here he comes. Go ahead,
Mr. Shouse.
THEODORE S. SHOUSE: Could you, um, state your name and
spell your last name for the record, please?
DR. SCOTT HAAS: Scott Haas, H-A-A-S.
THEODORE S. SHOUSE: And how are you employed, doctor?
DR. SCOTT HAAS: I am the Medical Director

for the
11 Department of Corrections.
12 THEODORE S. SHOUSE: Okay. Is it fair to say that you're in
13 charge of everything medical for DOC?
14 DR. SCOTT HAAS: Yes.
15 THEODORE S. SHOUSE: Okay. How long have you been the
16 Medical Director for the Department of Corrections?
17 DR. SCOTT HAAS: Since June, uh, 25th of 2004.
18 THEODORE S. SHOUSE: Okay, so a little less than a year.
19 DR. SCOTT HAAS: Yes.
20 THEODORE S. SHOUSE: Okay. Where did you go to medical
21 school, doctor?
22 DR. SCOTT HAAS: University of Louisville School of
23 Medicine.
24 THEODORE S. SHOUSE: What kind of medicine do you practice?

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1 DR. SCOTT HAAS: At this point, um, it's administrative
2 medicine. Uh, historically, I've practiced general adult and
3 forensic psychiatry, and some general medicine.
4 THEODORE S. SHOUSE: You're, you're
5 primarily a
psychiatrist, is that correct?

DR. SCOTT HAAS: Correct.
THEODORE S. SHOUSE: Okay. Are you Board certified in anything?
DR. SCOTT HAAS: Yes, I am.
THEODORE S. SHOUSE: And what would that be?
DR. SCOTT HAAS: General and Forensic Psychiatry.
THEODORE S. SHOUSE: Okay. So you're a Board-certified psychiatrist?
DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: All right. Can you tell me what problems can occur when starting an IV, when siting an IV, in your medical experience?
DR. SCOTT HAAS: You can have difficulty locating the vein that you're trying to insert an IV into. Uh, you may locate the vein, uh, start inserting the IV, and miss the vein.
THEODORE S. SHOUSE: Um-hm [yes].
DR. SCOTT HAAS: You may go through the vein. Sometimes you can get the IV needle inserted into the vein properly, but then the vein just doesn't tolerate the IV being in there, what they call a blown vein, which must means that it - we lose integrity of the vein.

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THEODORE S. SHOUSE: Okay. Is it, uh, generally more difficult to start an IV in people who are overweight?
DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Is it generally more difficult to start an IV in someone who's a drug abuser?
DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Or who has been a drug abuser. Would you ever site an IV in the carotid artery?
DR. SCOTT HAAS: No.
THEODORE S. SHOUSE: Okay. Can you tell me what drugs are used in a lethal injection in the Commonwealth of Kentucky?
DR. SCOTT HAAS: I believe the drugs used are sodium thiopental, pancuronium bromide and potassium chloride.
THEODORE S. SHOUSE: Do you have any knowledge of why these three drugs are used in Kentucky?
DR. SCOTT HAAS: Say again.
THEODORE S. SHOUSE: Do you have any knowledge of why these three drugs are used in Kentucky?
DR. SCOTT HAAS: No, I don't. If you're asking how they were chosen, no, I, I don't know specifically why

those drugs
were chosen. I do have some general knowledge that other states
use a similar combination of drugs in their lethal injections.
THEODORE S. SHOUSE: Okay. Uh, do you know why those three
drugs and not two drugs?
DR. SCOTT HAAS: No, I do not.

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THEODORE S. SHOUSE: Okay. Can you tell me, uh, what sodium
thiopental is used for in a therapeutic setting?
DR. SCOTT HAAS: It is for induction of hypnosis or a
sedative state, to put someone to sleep.
THEODORE S. SHOUSE: Okay. And how long does a dose usually
last?
DR. SCOTT HAAS: It depends on the amount of drug given.
THEODORE S. SHOUSE: Okay. It depends on the amount of
drug given, but, uh, in a therapeutic setting, how long does it
usually last?
DR. SCOTT HAAS: It depends on the amount of drug given as
to how long it will last.
THEODORE S. SHOUSE: Okay. Um, do you remember when I
deposed you on November the 4th of last year?

DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Okay. Do you remember telling me then that a dose lasted, um, five minutes or less?
DR. SCOTT HAAS: No, I do not.
THEODORE S. SHOUSE: Okay. Okay. Um, all right, here we go. Um, I can't find it right now. Let me ask you this. Could an inmate be revived after administration of the sodium thiopental, but before the Pavulon is injected?
DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Okay. Who is generally responsible for mixing drugs prior to an injection in a hospital setting?

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DR. SCOTT HAAS: In a hospital, it's generally a pharmacist –
THEODORE S. SHOUSE: Okay.
DR. SCOTT HAAS: – who mixes medication.
THEODORE S. SHOUSE: Okay. Have you ever been asked by anyone within the Department of Corrections to render an opinion about any part of the lethal injection protocol used in Kentucky?
DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Okay. What were you asked?

DR. SCOTT HAAS: I was asked, uh, general information about
the drugs that are utilized in the execution protocol.
THEODORE S. SHOUSE: Okay. And what is, what is, what is
your opinion about that?
DR. SCOTT HAAS: I don't have an opinion about the drugs
that are used. I was asked about the clinical information on how
the drugs work, what it is that they actually do when given.
THEODORE S. SHOUSE: Okay. Any other part of the protocol
you were ever asked about?
DR. SCOTT HAAS: I believe I was asked, uh, at one point, by
Counsel – there was a discussion about the amount of, uh, sodium
thiopental to be used for the initial stage of the execution.
THEODORE S. SHOUSE: Okay. Have you ever seen the – you may
be aware there were some changes made to the protocol, uh, on
December the 14th of this past year. Were, were you aware of
that?
DR. SCOTT HAAS: Yes.

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THEODORE S. SHOUSE: Okay. Have you

ever seen the current
protocol, the one that post-dates those changes?
DR. SCOTT HAAS: No, I have not.
THEODORE S. SHOUSE: Okay. Do you – are you aware of any
responsibilities you may have under the current protocol in
existence in the Commonwealth?
DR. SCOTT HAAS: I have not reviewed the current protocol.
I assume any responsibilities would be similar to the previous,
but no – specifically to the new protocol, no, I'm not aware.
THEODORE S. SHOUSE: Okay. Um, what do you perceive your
role to be in regard to an execution by lethal injection in
Kentucky?
DR. SCOTT HAAS: Specifically, I don't have a role.
THEODORE S. SHOUSE: Okay.
DR. SCOTT HAAS: As a general administrator, as the Medical
Director for the Department, uh, part of my responsibility would
be to make sure that any other clinical staff performed their
responsibilities.
THEODORE S. SHOUSE: Okay. Now I would like to show you
part of that protocol, please.
DR. SCOTT HAAS: All right.
THEODORE S. SHOUSE: This has already

been admitted into the
23 record, Judge.
24 JUDGE ROGER CRITTENDEN: All right.
25 THEODORE S. SHOUSE: Okay. What's the title of this
26 checklist, doctor?

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1 DR. SCOTT HAAS: "Pre-Execution Medical Action Checklist
2 Actions" –
3 THEODORE S. SHOUSE: This is – I'm sorry, go ahead.
4 DR. SCOTT HAAS: – "Actions Taken After Receiving Execution
5 Order."
6 THEODORE S. SHOUSE: Okay. And what's the date on that?
7 DR. SCOTT HAAS: December 14th, 2004.
8 THEODORE S. SHOUSE: Okay. Number one on this list is that,
9 uh, "The Department of Corrections Medical Director and the Nurse
10 Service Administrator are to be notified immediately upon receipt
11 of a Governor's Death Warrant." Is that right?
12 DR. SCOTT HAAS: That is correct.
13 THEODORE S. SHOUSE: Okay. Now, #2, "Begin a special
14 section of condemned's medical record for all medical actions."
15 In your medical opinion, does that give you any direction on

what's to be placed in that special medical section?
DR. SCOTT HAAS: No.
THEODORE S. SHOUSE: Okay. How about #3, "Nurse visits and checks on the condemned each shift, seven days a week, using the special medical section to record contacts and observations."
Does that give the nurse any direction on what she, he or she, is to be looking for?
DR. SCOTT HAAS: No.
THEODORE S. SHOUSE: Okay. If you could turn the page, please. Now I'd like to ask you a question about this. Now you're a Board-certified psychiatrist, is that correct?

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DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Do you anticipate, looking at #4, it says "Psychologist" – and I know, I understand the difference between a psychologist and a psychiatrist – but it says, "Psychologist personally observes and evaluates the condemned five days a week, Monday through Friday." Do you anticipate, or is it probable, that you would be the

psychologist referred to
in #4?
DR. SCOTT HAAS: No.
THEODORE S. SHOUSE: Okay. Uh, you're the Medical Director.
How would you – what steps would be taken to determine what
psychologist would, uh, would carry out #4 there?
(Bell ringing)
JUDGE ROGER CRITTENDEN: I, I, I, I don't meant to
interrupt, but it sounds like it's striking 45, I don't know.
THEODORE S. SHOUSE: I think that probably means we have a
new Pope, Judge.
JUDGE ROGER CRITTENDEN: Okay. Oh, is that right?
THEODORE S. SHOUSE: I think probably. Yes, sir.
JUDGE ROGER CRITTENDEN: Oh, it may – okay.
THEODORE S. SHOUSE: It's, it's, it's not coming from the
courthouse, it's coming from (inaudible). Ten minutes past
(inaudible). Um –
JUDGE ROGER CRITTENDEN: Thank you. Do you actually think
that it's –

JEFF MIDDENDORF: Actually, it's ten minutes past seven,
just to correct (inaudible).
(Inaudible/mixed and muffled voices)
THEODORE S. SHOUSE: So do you anticipate being the
psychologist named in #4?
DR. SCOTT HAAS: No, I do not.
THEODORE S. SHOUSE: Okay. Why not?
DR. SCOTT HAAS: I'm not a psychologist.
THEODORE S. SHOUSE: Okay. Do you have any idea how that
psychologist might be retained?
DR. SCOTT HAAS: There are a number of options available to
the Department.
THEODORE S. SHOUSE: Okay, what are those options?
DR. SCOTT HAAS: There is a psychologist currently assigned
to the Kentucky State Penitentiary.
THEODORE S. SHOUSE: Okay.
DR. SCOTT HAAS: Uh, there could be a contract put out, a
bid put out to obtain a contract, uh, for a psychologist to come
in from outside the Department of Corrections to perform this
function. Uh, psychologists who are assigned to another
institution could be brought in to perform the function.
THEODORE S. SHOUSE: Okay. Would you participate in that

decision-making process?
DR. SCOTT HAAS: It is very likely.
THEODORE S. SHOUSE: Okay. And as a Board-certified
Psychiatrist, does #4 give the psychologist who would be retained

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any direction? It says "observes and evaluates." Do you think
that gives that psychologist any direction at all?
DR. SCOTT HAAS: As to –?
THEODORE S. SHOUSE: What they're supposed to be evaluating.
DR. SCOTT HAAS: No.
THEODORE S. SHOUSE: Okay. We'll skip #5. Okay, #6 here,
because this directly relates to you: "The Department of
Corrections Medical Director or his designee reviews and initials
nursing documentation in #3 daily." Is that anything more than
an instruction just to initial whatever the nurse has written
down?
JEFF MIDDENDORF: Object to the form of the question. It
says "reviews and initials."
THEODORE S. SHOUSE: Okay, well, is that anything more than
a look at and initial the nurse's notes?

DR. SCOTT HAAS: Yes, it is to review and initial.
THEODORE S. SHOUSE: Okay. Um, what are you reviewing it for?
DR. SCOTT HAAS: It doesn't say.
THEODORE S. SHOUSE: Okay. Now, #7 here, and I suspect that what's – forget what I suspect. Number four says psychologist, is that correct?
DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Could you please read #7?
DR. SCOTT HAAS: "Psychiatrist reviews nursing and doctor's documentation weekly."

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THEODORE S. SHOUSE: Okay. So do you think that there's going to be – okay, do you think you could be the psychiatrist referred to in #7?
DR. SCOTT HAAS: Unlikely.
THEODORE S. SHOUSE: Why not?
DR. SCOTT HAAS: Because I don't perform in a clinical capacity at this point. I perform an administrative function for the Department.
THEODORE S. SHOUSE: Okay. How long have you been employed

by the Department of Corrections?
DR. SCOTT HAAS: Since 1993.
THEODORE S. SHOUSE: Okay. Uh, 12, we're, we're in your
twelfth year.
DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Okay. So based on your, and in those
12 years, how many policies, procedures, protocols, DOC documents
do you think you've looked at?
DR. SCOTT HAAS: Numerous.
THEODORE S. SHOUSE: Okay. So do you interpret – we're on
#7 here – do you interpret this, so far, that we're talking about
a minimum of four different people being involved: one, a
psychiatrist, not you because you're not clinical anymore; two, a
psychologist, not you because you're not a psychologist; three, a
nurse, or the Nurse Service Administrator, not you because you're
neither of those things; and four, the Medical Director of the
Department of Corrections, that is you.

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DR. SCOTT HAAS: Although it says Department of Corrections
Medical Director, as I note in my deposition, I think the intent

of what I read from the protocol during my deposition, was actually apparently the Health Authority of the institution.

THEODORE S. SHOUSE: Okay. So you think that that Department of Corrections Medical Director means Dr. Hiland?

DR. SCOTT HAAS: Well, where it says Department of Corrections Medical Director or his designee –

THEODORE S. SHOUSE: Um-hm [yes].

DR. SCOTT HAAS: – um, in all likelihood, the designee would be the mental, the Health Authority – not mental health, but the Health Authority for the institution.

THEODORE S. SHOUSE: Who's the Health Authority for the institution?

DR. SCOTT HAAS: At KSP it would be Dr. Hiland.

THEODORE S. SHOUSE: Dr. Hiland. Okay. So this is you, you read number, you read where it says "Medical Director or his designee" to mean either yourself or Dr. Hiland?

DR. SCOTT HAAS: Yes.

THEODORE S. SHOUSE: Okay. So you wouldn't be the psychiatrist in #7?

DR. SCOTT HAAS: No.

THEODORE S. SHOUSE: Okay. What about number – can you turn

to #8, please? It says, "Physical examination is completed by the DOC Medical Director or his designee not later than seven days prior to execution." Is that #8?

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DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Okay. In your opinion, does that give you any guidance on what you're to be looking for?
DR. SCOTT HAAS: No.
THEODORE S. SHOUSE: Okay. Now #10. We're going to skip #9. "Psychiatric evaluation is completed by the psychiatrist no later than seven days prior to execution." And, and I, again, I don't want to put words in your mouth, but you don't anticipate being that psychiatrist.
DR. SCOTT HAAS: No.
THEODORE S. SHOUSE: And is that because you don't work in a clinical setting?
DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Okay. Any idea who that psychiatrist might be?
DR. SCOTT HAAS: Not at this time.
THEODORE S. SHOUSE: How many different kinds of psychiatric

evaluations are there?
DR. SCOTT HAAS: There are a number of different types of
psychiatric evaluation.
THEODORE S. SHOUSE: Dozens?
DR. SCOTT HAAS: Probably a fair statement.
THEODORE S. SHOUSE: How many different – look at #11,
please. "Place the psychiatric interview and psychiatric
evaluation into permanent mental record – medical record, and

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send copies to the Warden." What does that instructing the
psychiatrist to do there?
DR. SCOTT HAAS: Conduct an interview and a psychiatric
evaluation, put it in the record, send copies to the Warden.
THEODORE S. SHOUSE: How many kinds of psychiatric
interviews are there?
DR. SCOTT HAAS: Dozens.
THEODORE S. SHOUSE: Dozens? Okay, would you look at # 12,
please? "DOC Medical Director or his designee personally
observes and evaluates the condemned's medical condition weekly."
I, again, you don't think that that DOC Medical Director – that's

a little different. That says "DOC Medical Director or his designee." Do you anticipate being the person to conduct #12?

DR. SCOTT HAAS: No, I don't.

THEODORE S. SHOUSE: Okay. Let me ask you this. Where do you anticipate being should there be an execution conducted on the grounds of the Kentucky State Penitentiary?

DR. SCOTT HAAS: Where I'm told to be.

THEODORE S. SHOUSE: Where you're told to be? Okay, has anybody told you about any responsibilities you may have, vis-a-vis, reviving an inmate?

DR. SCOTT HAAS: Yes, there have been discussions about that.

THEODORE S. SHOUSE: Okay. So do you anticipate being #12? I'm sorry, I got a little off track there.

DR. SCOTT HAAS: No.

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THEODORE S. SHOUSE: Okay. Okay. We can set that aside and – but just to, just to wrap that up. So you don't see, in your opinion, any direction to you or to any retained or contracted staff, in this checklist, is that fair to say?

DR. SCOTT HAAS: Say that one more time, please.
THEODORE S. SHOUSE: You know, you're right. That's not quite fair, is it?
DR. SCOTT HAAS: No.
THEODORE S. SHOUSE: This is just a list of physical instructions – go look, initial, record, file – is that fair to say?
DR. SCOTT HAAS: I don't know if it's fair to say.
THEODORE S. SHOUSE: Okay. Tell me what you think this –
DR. SCOTT HAAS: It's asking medical professionals to perform their, their jobs.
THEODORE S. SHOUSE: Okay, fair enough. Now – now, you are a psychiatrist.
DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: How many psychiatrists are employed by the Department of Corrections, just if you know?
DR. SCOTT HAAS: Four.
THEODORE S. SHOUSE: All right. Is there a psychiatrist stationed at the Penitentiary?
DR. SCOTT HAAS: Not full-time. There is one that provides clinical services (inaudible) Kentucky.

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THEODORE S. SHOUSE: Okay. Do you anticipate – um, are you aware that another checklist calls for a therapeutic dose of Valium to be injected to the inmate, um, on the day of the execution?

DR. SCOTT HAAS: Yes.

THEODORE S. SHOUSE: Okay. Do you anticipate being the physician who would perform that injection?

DR. SCOTT HAAS: No.

THEODORE S. SHOUSE: And why not?

DR. SCOTT HAAS: I typically do not perform injections.

THEODORE S. SHOUSE: Do you have any idea who that might be?

DR. SCOTT HAAS: In all likelihood, it would be a nurse at the facility.

THEODORE S. SHOUSE: Okay. Just one second.

(Inaudible/mixed and muffled voices)

THEODORE S. SHOUSE: I'm sorry, sir.

(Bell still ringing)

JUDGE ROGER CRITTENDEN: There was, there was some noise that came out of Good Shepherd Church years ago when the Federal judge, um, who was located down (inaudible), ordered them to

shut the noise down. (Laughter) I don't intend to do that.
(Laughter)
THEODORE S. SHOUSE: Um, you're, you're familiar with the
effect of pancuronium bromide on the, on a person?
DR. SCOTT HAAS: Yes.

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THEODORE S. SHOUSE: Okay. Would it be possible to be
conscious, aware and in pain, uh, but unable to move while under
the influence of pancuronium bromide?
DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Okay. Is, uh, potassium chloride
painful when injected into a conscious person?
DR. SCOTT HAAS: Yes.
THEODORE S. SHOUSE: Okay. Uh, is sodium thiopental used in
surgical procedures today, 2005?
DR. SCOTT HAAS: I don't believe it is commonly used in
surgical procedures any longer.
THEODORE S. SHOUSE: Okay. Do you know why not?
DR. SCOTT HAAS: No, I do not.
THEODORE S. SHOUSE: Okay. You've had – have you had any
training in using thiopental, sodium thiopental?
DR. SCOTT HAAS: No.

17 THEODORE S. SHOUSE: Okay. Um, you just said you didn't
18 believe that thiopental was widely used in surgical procedures
19 today. When it was used – well, first of all, do you understand
20 that at one time it was more common than it is today?
21 DR. SCOTT HAAS: Yes.
22 THEODORE S. SHOUSE: Okay. And when it was used, what was
23 it used for?
24 DR. SCOTT HAAS: Induction of anesthesia.
25 THEODORE S. SHOUSE: Okay. And how long was the patient
26 anesthetized?

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1 DR. SCOTT HAAS: That I don't know. It would be dose
2 dependent. It's a rapid-onset, short-acting anesthetic agent.
3 THEODORE S. SHOUSE: Okay. But for a short time, to be
4 anesthetized for a short time?
5 DR. SCOTT HAAS: Depending on the dose, but yes.
6 THEODORE S. SHOUSE: Okay. Okay.
7 (Inaudible/mixed and muffled voices)
8 THEODORE S. SHOUSE: Okay. Now I finally found it. Do you
9 remember when I deposed you?
10 DR. SCOTT HAAS: Yes.

THEODORE S. SHOUSE: Okay. I'm on page 22 of his deposition, at the bottom. Okay, um, I'm going to give it some context. Could you read what you say here?

DR. SCOTT HAAS: Um-hm [yes].

THEODORE S. SHOUSE: I'm going to follow along.

DR. SCOTT HAAS: "Sodium pentothal is not really used in surgical procedures anymore. I've not had any training on the use of Sodium pentothal."

THEODORE S. SHOUSE: And I say, "Okay. Correct. Why is it not used in surgery any longer?"

DR. SCOTT HAAS: "I don't know. I could ask an anesthesiologist for a specific answer, but I don't know."

THEODORE S. SHOUSE: And then I say, "Okay, okay. Do you know what is used today?" And there's probably some misspellings of these drugs.

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DR. SCOTT HAAS: "Halothane is used for general anesthesia, anesthesia for a long procedure. Sodium pentothal, when it was used, in all likelihood was used for very brief.

For example,
like (inaudible) therapy, would apply electricity to the brain,
cause seizures, when used something (inaudible) of those
procedures, you needed a very short-acting anesthetic,
(inaudible) like sodium pentothal, very short, quick, in-and-out
kind of drug (inaudible) usually put people unconscious for five
minutes or less. It has an onset of action probably of ' than
60 seconds so that (inaudible) paralyzes the muscles in a person
that actually has an active seizure. The brain has seizure
activity that is not physically expressed, while the (inaudible).
I don't know."
THEODORE S. SHOUSE: Okay. So very short, quick, in-and-out
kind of drug, usually put people unconscious for five minutes or
less.
JEFF MIDDENDORF: Your Honor, I'm going – at this point, I'm
going to object to the form of the question.
MALE VOICE: (Inaudible)
JEFF MIDDENDORF: If he would ask him about the, the amount
involved in this procedure –
JUDGE ROGER CRITTENDEN: I understand.
JEFF MIDDENDORF: – I think it would be

relevant.

24 THEODORE S. SHOUSE: That's all I've got, Judge.

25 JUDGE ROGER CRITTENDEN: Okay. Thank you, Mr., thank you,

26 Mr. Shouse. Mr. Middendorf?

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1 JEFF MIDDENDORF: What about a three-gram dose of sodium

2 thiopental? How long do you think somebody would be unconscious

3 if they were given that?

4 DR. SCOTT HAAS: In all likelihood, hours.

5 JEFF MIDDENDORF: As a physician, would you expect someone

6 else to give you directions when you're conducting a physical?

7 DR. SCOTT HAAS: No. We're trained to assess what needs to

8 be done during an examination.

9 JEFF MIDDENDORF: I know you testified that sodium

10 thiopental isn't used as much, but it is still used in hospitals

11 today. Is that correct?

12 DR. SCOTT HAAS: Yes. What it's used for typically these

13 days is induction, either to get someone on their way to sleep as

14 a preliminary drug, one of two sometimes that they'll use to put

15 someone to sleep.

JEFF MIDDENDORF: Same thing with a paralytic agent like pancuronium bromide? That's also used in hospitals today?
DR. SCOTT HAAS: Yes.
JEFF MIDDENDORF: Okay. What about potassium chloride – still used in hospitals today?
DR. SCOTT HAAS: Yes.
JEFF MIDDENDORF: Um, uh, now you do recall a conversation with me – I think Mr. Shouse brought this up – uh, regarding moving from two to three grams. Is that correct?
DR. SCOTT HAAS: Yes.

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JEFF MIDDENDORF: Sodium thiopental. And I asked you, um, what kind of, or would the unconsciousness of an individual last longer. Do you recall that conversation with me?
DR. SCOTT HAAS: Yes, I do.
JEFF MIDDENDORF: And were you able to provide me information regarding that?
DR. SCOTT HAAS: Yes. Um, the information I believe that I proved to you was that sodium thiopental is a drug that's rapidly absorbed into fat stores in the body. Um, so the

lower the
dose, the quicker, um, the concentration is depleted from the
bloodstream and stored in the fat. As you go up on the dose,
what happens is you saturate the fat's ability to keep absorbing
the drug. And so once you reach that saturation point with a
dose of two to three, four grams, uh, the concentration in the
blood of sodium thiopental actually rises very quickly, and
then falls very slowly. So you take what is a quick-onset,
short-acting drug, and with a whopping dose of three grams, four
grams would be, uh, you actually change the characteristics to a
quick-acting or a rapid-onset, long-acting.
JEFF MIDDENDORF: And, and, and I also think one of the
concerns that, that we had mentioned was not going to a third
syringe. Were you able to convert, uh, to cc's for me to
determine if we could get three grams in the same two syringes
that we use?
DR. SCOTT HAAS: Yeah. I remember – I don't remember
specifically how many syringes, uh, we were talking about using.

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I remember asked – being asked to calculate how many grams could be in so many cc's of solution.
JEFF MIDDENDORF: Are there other people employed by the Kentucky Department of Corrections other than nurses and doctors that are able to insert IV lines?
DR. SCOTT HAAS: Sure.
JEFF MIDDENDORF: What type of people does the Kentucky Department of Corrections employ that would be able to do this?
DR. SCOTT HAAS: We have some Emergency Medical Technicians, uh, that work for ambulance services, some that work for our own ambulance service. We also have some correctional staff that are phlebotomists, trained as phlebotomists.
JEFF MIDDENDORF: Okay. Given your experience, who is most often, uh, the people that are gone, or that somebody is asked to insert an IV needle in a hospital?
DR. SCOTT HAAS: Uh, phlebotomists and IV technicians.
JEFF MIDDENDORF: Are you aware if medical residents in hospitals are typically trained by phlebotomists to insert IV

lines?
DR. SCOTT HAAS: Yes.
JEFF MIDDENDORF: And why are they typically asked to do
that?
DR. SCOTT HAAS: Why are the phlebotomists trained?
JEFF MIDDENDORF: Correct.
DR. SCOTT HAAS: Training us?

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JEFF MIDDENDORF: Or asked – why are the phlebotomists asked
to typically ins-, show residents how to insert IV lines?
DR. SCOTT HAAS: They do it all the time. They know more
about it than just about anybody else.
JEFF MIDDENDORF: Would you agree with the statement that
they do it, uh, many times more than a doctor would?
DR. SCOTT HAAS: Yes.
JEFF MIDDENDORF: What about a nurse?
DR. SCOTT HAAS: Many times more than a nurse.
JEFF MIDDENDORF: Are you aware what infiltration is?
DR. SCOTT HAAS: Yes.
JEFF MIDDENDORF: Would a, your general, I guess, would
somebody not with a medical background be able to notice if there

were infiltrations at an IV site when the amount of fluid that is pushing, going through a vein in, in an execution, is pushed through. Do you under-, I, I did a horrible job asking that. But do you understand what I'm asking you? If we had missed the vein, the IV Team had missed the vein, and we were pushing that amount of fluid into, or trying to push it into that vein, would you be able to notice that it wasn't going in?

DR. SCOTT HAAS: Yes.

JEFF MIDDENDORF: Okay. Would it be very obvious?

DR. SCOTT HAAS: It would be very obvious.

JEFF MIDDENDORF: Okay. That's all the questions I have, Judge.

* * * *

IN THE CIRCUIT COURT
FOR FRANKLIN COUNTY
COMMONWEALTH OF KENTUCKY

RALPH BAZE, and, THOMAS C. BOWLING, Plaintiffs,	CIV. ACTION 04-CI-01094
v.	
JOHN D. REES, Commissioner, Kentucky Department of Corrections, Frankfort, Kentucky	
GLENN HAEBERLIN, Warden, Kentucky State Penitentiary, Eddyville Kentucky, and, UNKNOWN EXECUTIONERS,	
Defendants.	

April 20, 2005

Ms. Weihrer
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* * * *

THEODORE S. SHOUSE: Okay, Ms. Weihrer. Can I stand a little closer to the witness, Judge, so she can make out my form?

JUDGE ROGER CRITTENDEN: Yes.

THEODORE S. SHOUSE: These, these gentlemen, obviously can do – will do the same, or can do the same on cross-examination.

JUDGE ROGER CRITTENDEN: The only thing is, when you move out –

THEODORE S. SHOUSE: I don't get caught on the tape, do I?

JUDGE ROGER CRITTENDEN: Sometimes you don't. Sometimes you do. It depends on how –

THEODORE S. SHOUSE: All right, well, I'll just (inaudible/mixed voices)

JUDGE ROGER CRITTENDEN: If you're close enough to be caught on her microphone, then you're all right.

THEODORE S. SHOUSE: Can you see me at all, Ms. Weihrer?

CAROL WEIHRER: Just the form.

JUDGE ROGER CRITTENDEN: Why don't you just move up?

THEODORE S. SHOUSE: Okay. Okay. Can you um, state your

name for the record and spell your last name?

CAROL WEIHRER: Carol Weihrer. W-E-I-H-R-E-R.

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THEODORE S. SHOUSE: Okay, and where do you live, Ms. Weihrer?

CAROL WEIHRER: Reston, Virginia.

THEODORE S. SHOUSE: All right. And um – I'm sorry, I've lost my – (inaudible). At any rate – okay. And how are you employed, ma'am?

CAROL WEIHRER: I run the Anesthesia Awareness Campaign, Inc.

THEODORE S. SHOUSE: Okay. And what is the Anesthesia Awareness Campaign, Inc.?

CAROL WEIHRER: It's a nonprofit patient advocacy organization whose goal is to be supportive of other victims of anesthesia awareness, to work with doctors and teaching hospitals to prevent this in the future, to educate the public in general, and to distribute free information and support to anyone who desires it.

THEODORE S. SHOUSE: Okay. Tell the

Court briefly, what is
18 anesthesia awareness?
19 CAROL WEIHRER: Um, anesthesia awareness –
20 JUDGE ROGER CRITTENDEN: You can – you can talk directly to
21 him; I have a monitor, I can see. Thank you.
22 CAROL WEIHRER: Okay. Anesthesia awareness is the
23 phenomenon of supposedly being under a full general anesthesia,
24 and the brain third of the anesthesia cocktail does not work.
25 So you are paralyzed totally, you have some pain medication
26 which works on different degrees with victims, but your brain

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1 is absolutely awake and aware, and you are in a dead body. You
2 cannot move, you cannot talk, you cannot communicate in any way.
3 THEODORE S. SHOUSE: Okay. I'm going to ask you to keep
4 your voice up; I'll bet these gentlemen are having a hard time
5 hearing you.
6 CAROL WEIHRER: Okay.
7 THEODORE S. SHOUSE: Um, okay. Have you written anything
8 about anesthesia awareness?

CAROL WEIHRER: Yes, I've written several brochures and pamphlets and publications.
THEODORE S. SHOUSE: Okay, have you spoken to any groups or organizations about anesthesia awareness?
CAROL WEIHRER: Yes. I give Grand Rounds in teaching hospitals, and I've spoken as a keynote speaker at an international conference on memory awareness in anesthesia. I've had various television, newspaper, radio and magazine articles.
THEODORE S. SHOUSE: Okay, what are some – what are some of the hospitals where you've addressed their doctors?
CAROL WEIHRER: Johns Hopkins University in Baltimore, Maryland; the University of Virginia in Charlottesville; West Virginia University in Morgantown; Fairfax Hospital in Fairfax, Virginia, among others.
THEODORE S. SHOUSE: Okay. Are these primarily anesthesiologists you're speaking to when you go to these hospitals?

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CAROL WEIHRER: These are Anesthesia

Grand Rounds, where all
the anesthesiologists are required to attend.
THEODORE S. SHOUSE: Okay. Have you ever testified in court
about anesthesia awareness before?
CAROL WEIHRER: Yes, I have.
THEODORE S. SHOUSE: Okay. Where, about?
CAROL WEIHRER: Louisiana, Tennessee, Virginia, here –
THEODORE S. SHOUSE: Okay.
CAROL WEIHRER: – and I've done some others by affidavit
THEODORE S. SHOUSE: Okay. And what caused you to get
involved in anesthesia awareness as an issue and to found the
Anesthesia Awareness Campaign?
CAROL WEIHRER: I was one of those unfortunate people who
was left awake during surgery while they removed my eye. I was
absolutely as aware as I am right now, but could communicate in
no way that I was awake, fearful, terrified, and in pain.
THEODORE S. SHOUSE: Okay. When was this surgery to remove
your eye?
CAROL WEIHRER: January 24th, 1998.
THEODORE S. SHOUSE: Okay. And tell the court what
happened.

CAROL WEIHRER: I went into surgery in a very good frame of mind because removal of my eye was my only hope for relief from intractable pain. So I did not have a high fear factor. The anesthesiologist was the last person to arrive. He took a very quick – less than five-minute – history using my stomach as a

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piece of furniture to write on. I went into the operating room very shortly thereafter and did go to sleep, and then woke to hearing disco music and trying to figure out why my surgeon would be listening to disco music, and then I heard him say "Cut deeper, pull harder." And I realized that I was not done; we we were just beginning.

THEODORE S. SHOUSE: Do you – when you say "just beginning," you mean the surgery had just begun?

CAROL WEIHRER: They were – the surgeon was instructing the resident how deep to cut and how hard to pull.

THEODORE S. SHOUSE: Okay.

CAROL WEIHRER: And so they were just beginning.

THEODORE S. SHOUSE: Could you move?
CAROL WEIHRER: No way. I was screaming at the top of my lungs, but I knew no sound was coming out. I was trying to move an eye, my face – I felt a cloth over my face. My head would not move, I tried a finger and a toe and an arm and a leg. And nothing moved, until twice I did hear the surgeon tell the anesthesiologist "she's moving."
THEODORE S. SHOUSE: Now from what you could hear, could you tell if the doctors knew that you were aware, that you were conscious.
CAROL WEIHRER: No.
THEODORE S. SHOUSE: Okay. Now, these doctors were right beside you
CAROL WEIHRER: Yes, sir.

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THEODORE S. SHOUSE: And they were of course touching you.
CAROL WEIHRER: Yes. I could feel instruments on my chest. I knew who was standing where. At one point the anesthesiologist was playing with the tube in my throat. And I don't know what I moved: all I know is that for my effort I

received two more doses
of a paralytic drug.
THEODORE S. SHOUSE: Okay. What did that paralytic drug
feel like when it was injected?
CAROL WEIHRER: Absolute fires of hell.
THEODORE S. SHOUSE: Okay. Now, so they were touching
you, they were operating on you – and these were of course
professionally trained medical people.
CAROL WEIHRER: Yes, absolutely.
THEODORE S. SHOUSE: They were medical doctors.
CAROL WEIHRER: Yes.
THEODORE S. SHOUSE: Okay. And from what you could – from
what you could hear, from what you could feel, they couldn't tell
that you were conscious.
CAROL WEIHRER: No. In fact, I felt the automatic blood
pressure cuff go off at one point and thought "Well, this will
surely tell them I'm awake." And nothing was said or done.
THEODORE S. SHOUSE: Okay. How long did this last?
CAROL WEIHRER: From what I remember and how long it would
take, somewhere between 45 minutes and two hours. I was fully
awake when they cut the optic nerve: I saw everything go black.

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THEODORE S. SHOUSE: Okay. Can, um – can you describe what the pain was like?

CAROL WEIHRER: My pain was not of the cutting nature; 25 to 50 percent of victims of awareness feel that Uh, but I did feel tremendous pulling, as if it were a tooth, and I could not turn my head to go with the pressure. I felt instruments on my, on my chest. I, the, uh, vaporizer went out at one point and the anesthesiologist was pulling on the tube in my throat, and I felt the need to gag, and I couldn't decide which was worse, the need to gag or the pulling on my eye. Um, and then, the first shot that burned, which at the time I did not know what it was, but it was a paralytic drug. I, at first, thought "Well, they, they've cut the optic nerve, I know that I'm blind now in that eye and the other one's covered, maybe I'm following the heat of the proverbial light to Heaven." I, I wanted to die. And when they gave me the second shot, which was even more painful, the second time I

moved, I wondered if I
were on the coals of Hell. And being a person of great faith,
that haunts me to say that I was willing to sell my soul to get,
get off that table, that I – I wanted to die. It was the worst
thing in your life. You, you are absolutely entombed in a
corpse. You cannot move, but you are a hundred percent alert.
It's terrible.
THEODORE S. SHOUSE: Okay.
MALE VOICE: (Inaudible)
THEODORE S. SHOUSE: You need to speak up a little bit.

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CAROL WEIHRER: It's terrible. It – you're – you feel like
you're a dead person, but you are wide awake.
THEODORE S. SHOUSE: Okay. Now, through your work as, uh,
the head of the Anesthesia Awareness Campaign, do you know about
how frequently they estimate this occurs?
CAROL WEIHRER: Recent studies that have been published in
medical journals have indicated awareness occurs –
JEFF MIDDENDORF: Objection, Judge. Do we have these

studies? Are they going to present these to us?

THEODORE S. SHOUSE: No, Judge, but she can certainly – she's reviewed these as part of her work heading up this Campaign.

JEFF MIDDENDORF: What – we need to be able to see these studies if she's going to be referring to studies.

THEODORE S. SHOUSE: And we will, of course, have an anesthesiologist here this afternoon.

CAROL WEIHRER: I can tell you (inaudible) –

JUDGE ROGER CRITTENDEN: Well, I'll allow her to testify on this. Go ahead.

THEODORE S. SHOUSE: Just about how often – frequently do – does this occur?

CAROL WEIHRER: It's been reported at 100 times per day in the United States. We know that's underreported and underestimated, we think by about as much as a third. And a new recent study indicates that this happens four to six times more often in pediatric patients.

THEODORE S. SHOUSE: Okay. Now, you told your doctors about this after the surgery?

CAROL WEIHRER: While I was still in the operating room.

THEODORE S. SHOUSE: Okay. And was you anesthesiologist aware of this happening in other cases?

CAROL WEIHRER: He never told me that, one way or the other.

THEODORE S. SHOUSE: How about your surgeon?

CAROL WEIHRER: My surgeon was not aware of awareness, which was not uncommon at that time (inaudible), nor had my corneal specialist.

THEODORE S. SHOUSE: They'd never heard of it.

CAROL WEIHRER: Well, my corneal specialist –

JEFF MIDDENDORF: (Inaudible) hearsay, Your Honor.

JUDGE ROGER CRITTENDEN: Um, I'm going to – I'm going to sustain.

THEODORE S. SHOUSE: Have you met other people who have experienced this?

CAROL WEIHRER: Yes. I have spoken personally on the phone with 2,500 or more victims of awareness. I've sent out packets to well over 10,000 people. And, uh, I have

a website –
21 THEODORE S. SHOUSE: Okay.
22 CAROL WEIHRER: – that people reach.
23 THEODORE S. SHOUSE: Just one second. That's all I have.

* * * *

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1 DR. MARK HEATH: Where do I stand, here?
2 JUDGE ROGER CRITTENDEN: That's fine. So you swear or
3 affirm the testimony you're about to give in this matter will be
4 the truth?
5 DR. MARK HEATH: I do.
6 JUDGE ROGER CRITTENDEN: Be seated.
7 DAVID M. BARRON: Could you please state your full name for
8 the record, spelling your last name?
9 DR. MARK HEATH: My name is Mark John Sherman Heath. And
10 the last name is spelled as H-E-A-T-H.
11 DAVID M. BARRON: What is your profession?
12 DR. MARK HEATH: I'm an anesthesiologist.
13 DAVID M. BARRON: How long have you
14 been an anesthesiologist?
15 DR. MARK HEATH: I started my training in 1988.
16 DAVID M. BARRON: Where did you go to

medical school?
DR. MARK HEATH: Uh, University of North Carolina in Chapel Hill.
DAVID M. BARRON: Are you currently licensed to practice Medicine?
DR. MARK HEATH: Yes, I am.
DAVID M. BARRON: In what state?
DR. MARK HEATH: New York State.
DAVID M. BARRON: When did you receive that license?
DR. MARK HEATH: I believe in 1989.

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DAVID M. BARRON: Do you belong to any professional organizations?
DR. MARK HEATH: International, uh, IARS, the International Anesthesia Research Society.
DAVID M. BARRON: Do you hold any Board certifications?
DR. MARK HEATH: Yes, I do.
DAVID M. BARRON: In what?
DR. MARK HEATH: In Anesthesiology.
DAVID M. BARRON: When did you receive that certification?
DR. MARK HEATH: Maybe 1991.
DAVID M. BARRON: In what?
DR. MARK HEATH: In Anesthesiology. I am also being credentialed for Echocardiography, certified

in Echocardiography.
DAVID M. BARRON: What is that?
DR. MARK HEATH: It's using, uh, sound waves to study the,
uh, activity of the heart. I'm cardiac anesthesiologist mostly.
DAVID M. BARRON: Let's talk a little bit about your current
employment. Where do you work?
DR. MARK HEATH: I work at Columbia University – Columbia
University Medical Center.
DAVID M. BARRON: What do you do there?
DR. MARK HEATH: Uh, it's a mixture of activities; uh,
clinical anesthesiology is the main one. I also do laboratory
research and it's a teaching hospital, so much of my time is
spent teaching medical students and residents and fellows.

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DAVID M. BARRON: During a surgical procedure at Columbia
University, where would you physically be located?
DR. MARK HEATH: Usually within a couple of feet of the
patient's head.
DAVID M. BARRON: What is your
function as an

anesthesiologist during those surgical procedures?

DR. MARK HEATH: Well, it's a pretty complex activity, but basically my job is to make sure that the patient, um, is unconscious during the procedure and that they survive the procedure with the minimum of complications.

DAVID M. BARRON: You mentioned anesthesiology and anesthesia a few times. Can you tell us –

JUDGE ROGER CRITTENDEN: Can you speak up a little bit Mr. Barron, I –

DAVID M. BARRON: Sure. Can you tell us –

MALE VOICE: (Inaudible)

JUDGE ROGER CRITTENDEN: I think I can, yes. And you can speak toward him. I have a monitor, that's fine. Thank you.

DAVID M. BARRON: Okay. Can you tell us what anesthesia is?

DR. MARK HEATH: Anesthesia – I'll break up the word, esthesia is the like word esthetics, it means to sense or to feel things. And when you put the letters A-N, or "an," in front of a word, it means the opposite of it. So, anesthesia means a state where one cannot sense or perceive

anything.
DAVID M. BARRON: Approximately what percentage of your time is dedicated to administering anesthesia in the operating room?

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DR. MARK HEATH: About 40 percent.
DAVID M. BARRON: You mentioned earlier that you also train residents. Can you tell us what you're training them on?
DR. MARK HEATH: I'm training them how to be good anesthesiologists. It involves an elbow-to-elbow supervision of the procedures associated with, uh, anesthesia and surgery, how to induce anesthesia, how to maintain anesthesia, how to emerge patients from anesthesia at the end of an operation, how to avoid complications.
DAVID M. BARRON: Approximately how much time do you spend training these residents?
DR. MARK HEATH: Many hours per week. It's hard to put a number on it, a lot of time.
DAVID M. BARRON: Now in addition to your clinical practice and your teaching, do you have any other responsibilities at

Columbia?
DR. MARK HEATH: I run a research lab.
DAVID M. BARRON: What do you research?
DR. MARK HEATH: I study, uh, neurotransmitters that are involved in signaling pain and stress responses.
DAVID M. BARRON: And how do you go about that research?
DR. MARK HEATH: Uh, it's mostly, uh, in animals, mostly rodents, doing, uh, behavioral studies and making genetic changes in, in mice to see how that affects their behavior and how it affects their response to stress and injury.

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DAVID M. BARRON: How does research on animals interrelate to the effects on human beings?
DR. MARK HEATH: A large part of what we know about how mammals work is based on animal research. Most of what we know about how mammals or humans don't work is based on humans. We see what goes wrong in people and then we use animals to figure out why something goes wrong and how we can treat it.
DAVID M. BARRON: Who funds your

research?

DR. MARK HEATH: Uh, the National Institutes of Health.

DAVID M. BARRON: Your Honor, may I have permission to mark Dr. Heath's curriculum vitae as Plaintiffs' Exhibit 10?

JUDGE ROGER CRITTENDEN: Yes.

JEFF MIDDENDORF: No objection, Judge.

JUDGE ROGER CRITTENDEN: No objection. You want to move to admit, go ahead. They don't have any objections.

JEFF MIDDENDORF: Let me make sure it is the same one.

Okay.

DAVID M. BARRON: Thank you. Dr. Heath, let's talk a little bit about consciousness. Are there different levels of consciousness?

DR. MARK HEATH: Yes. One doesn't have to be a doctor to know about that. We all know that one can be wide awake or completely unconscious to the point where one doesn't even respond to any kind of stimulation, and we can't wake somebody up. And there are all the steps in between. So, you can start from being wide awake, to being awake but kind of drowsy or

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sedated, to being barely awake in the middle of the night, kind of twilight zone, between awake and asleep. One can also be, uh, lightly unconscious, by which I would mean that you're not conscious but if someone stimulates you, shakes your shoulder or causes pain, you would wake up. And then finally, there's a state of unconsciousness where one is unarousable, one doesn't respond to any kind of stimulation at all.

DAVID M. BARRON: What is that last state called?

DR. MARK HEATH: Uh, if it's induced by drugs, we call it general anesthesia. If it's induced by brain injury, for example, we'd call it a coma.

DAVID M. BARRON: Would a higher dose of anesthesia for an individual patient be needed to achieve general anesthesia in the other planes of anesthesia you mentioned?

DR. MARK HEATH: Absolutely. Um, to render somebody completely unresponsive to all stimuli requires a significantly higher dose of anesthesia. You could think a bit like alcohol.

It might take one beer to make somebody a little bit sedated. It might take 12 beers to make them unconscious so that they did not respond to any stimulation.

DAVID M. BARRON: What is an analgesic?

DR. MARK HEATH: An analgesic is a drug that blocks pain. It doesn't do – strictly speaking, does not affect consciousness or anything else. It's just a painkiller. For example, we all know Tylenol is an analgesic drug.

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DAVID M. BARRON: What is the difference between an analgesic and an anesthetic?

DR. MARK HEATH: Well, as I said earlier, "anesthesia" refers to the blocking of all sensation and experience. That would mean blocking consciousness, memory, pain, anxiety, pleasure; everything would be blocked with anesthesia. Analgesia blocks pain but it does not block consciousness or anxiety or any other, uh, (inaudible) subconscious experience.

DAVID M. BARRON: What is a barbiturate?

DR. MARK HEATH: A barbiturate is a drug that is derived from barbituric acid and it's used to depress the central nervous system.

DAVID M. BARRON: What type of barbiturates exist?

DR. MARK HEATH: One way of classifying them is based on their duration of action. There are some barbiturates that will last for a day, and some barbiturates that will last for a minute. So we talk about long-acting barbiturates, intermediate-acting barbiturates, ultra-short-acting barbiturates.

DAVID M. BARRON: In a surgical setting, what is the difference between the long, short, ultra-short barbiturates that you just mentioned?

DR. MARK HEATH: Well, generally in a surgical setting, the only one – in most surgical cases, the only that would be used will be an ultra-short-acting barbiturate. It would be rare to

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use a long-acting barbiturate, although there are occasions when

that might be warranted.
DAVID M. BARRON: How long does a ultra-short-acting
barbiturate usually last?
DR. MARK HEATH: Well, the way they are used in, uh, uh, for
anesthesia in surgery, uh, it only lasts for a couple of minutes.
DAVID M. BARRON: Do you use ultra-short-acting barbiturates
by themselves?
DR. MARK HEATH: That would be very, very rare. Um, it, one
would only use an ultra-short-acting barbiturate by itself if one
were providing anesthesia for an ultra-short procedure.
DAVID M. BARRON: Why is that?
DR. MARK HEATH: Well, one needs to – as anesthesiologists,
one of the things we do is, is we talk to the surgeons, we know
about the operation, we come up with an understanding of how long
the procedure will probably take, and we design our anesthetics
based on how long we expect it to take. An ultra-short-acting
barbiturate would wear off if one were to try to use it for a
long procedure. It's technically possible to do. On a desert
island you could do it, but there'd be all kinds of problems with

trying to do it.
DAVID M. BARRON: What type of anesthetic do you usually use in your surgical procedures?
DR. MARK HEATH: Well, I rarely use ultra-short-acting barbiturates now. I use a, a different, more recently added drug called Propofol, um, and that is the drug that I use to induce

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anesthesia. And then as the surgery proceeds, we use, uh, drugs to maintain anesthesia, and that's usually a combination of inhaled gases and analgesics and, uh, sedatives and (inaudible) drugs. Then for the end of anesthesia, when we want the patient to wake up and start moving again, there are drugs that we use to reverse the effects of some of the drugs that we give.
DAVID M. BARRON: Are barbiturates also used to treat seizures?
DR. MARK HEATH: Yes they are, but you're out of my scope of expertise. That's something that neurologists would, would know a lot more about. But, yes, they can be used for that.

DAVID M. BARRON: How many surgical procedures have you participated in as an anesthesiologist?

DR. MARK HEATH: A lot. A couple of thousand, a few thousand, I'm not really sure.

DAVID M. BARRON: In what proportion of the entire surgical procedure was an anesthesiologist present?

DR. MARK HEATH: Just always an anesthesiologist or a nurse anesthetist is present during the conduct of anesthesia.

DAVID M. BARRON: Why is that?

DR. MARK HEATH: It's like driving. You have – things can go off track, uh, in seconds and so constant adjustments in titrations of the medication are needed depending what's happening during the surgery. So just as one couldn't climb into the backseat of your car when you are driving down the Interstate, you couldn't climb into the backseat of your car

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for a couple of minutes, you can't leave the operating room for a couple of minutes when conducting with anesthetic.

DAVID M. BARRON: Are you familiar with

the term
"intra-operative awareness"?
DR. MARK HEATH: Absolutely, yes.
DAVID M. BARRON: Is it, for the clarification and the
Court, is it also know by any other names?
DR. MARK HEATH: Intra-operative awareness, uh, conscious
paralysis, uh, being awake during anesthesia or awake during
surgery. There are a number of lay terms for it.
DAVID M. BARRON: Can you explain what that is?
DR. MARK HEATH: I guess I can. Um, during a general
anesthetic, which is the kind of anesthetic where the patient is
supposed to be completely asleep, very often the anesthesiologist
will administer drugs that paralyze the patient. Those drugs
have no effect on consciousness or the ability to experience
pain, but they stop the, the voluntary muscles from working. So
if for some reason there's a the problem with the administration
of anesthetic drugs, the drugs that block consciousness and pain
and sensation, then a patient can wake up in the middle of
surgery or in fact not even go to sleep, but be paralyzed and

nobody in the operating room may realize that this is going on.
DAVID M. BARRON: How often does this occur?
DR. MARK HEATH: No one really knows the answer to that.
There's estimates of, uh, one in 500 cases, but I think it's also
widely recognized in the literature at least that those estimates

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are (inaudible) – anesthetic awareness is underreported. Most of
the time it happens it does not get turned into a case report, or
into something that would, um, be captured in recordkeeping.
DAVID M. BARRON: Has this type of situation occurred in any
surgical procedures you've been involved with?
DR. MARK HEATH: Uh, it has, yes.
DAVID M. BARRON: Can you tell us about that?
DR. MARK HEATH: A number of situations come to mind. Um,
there are times when, uh, depending on the nature of the surgical
procedure or illness that a patient has where one is – one can't
give a lot of anesthesia. If one gave a lot of anesthesia, it

could lower the blood pressure or stop the heart and that would obviously be bad for the patient. So we would have to run what we call a "light anesthetic," and so sometimes patients after that have vague memories of things. There's also – a time that comes to mind where I was working with a resident who made a medication error, and I was having him inject the drugs. He injected a, a drug that he thought was an anesthetic drug but actually it was a blood-thinning drug that has no effect on consciousness or on the brain. And he then injected the paralyzing drug. When we tried to intubate the patient, which means putting in a breathing tube, we realized the patient wasn't anesthetized because the blood pressure went very, very high and the heart rate went very high. And we figured out that a medication error had occurred.

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DAVID M. BARRON: In light of the concerns you just mentioned, why would a paralyzing agent ever be used in surgery?

DR. MARK HEATH: Well, that's a good question. And indeed the recommendations now by the JCAHO is to only use paralyzing agents when absolutely necessarily. But there are times when the risk of intra-operative awareness is outweighed by the, by the benefit to the patient. One example would be if the surgeons are operating on a very delicate structure like, say, the eye or the middle of the brain or the very small bones in your ear, even a tiny motion on the part of the patient, a hiccup or a cough or a twitch, could be catastrophic. So in those situations, uh, most anesthesiologists would agree that it is very important to, to strongly paralyze the patient. Another reason that we often use paralyzing drugs is, uh, for surgery on the abdomen. It allows surgeons to make a relatively small incision and then use a retractor to stretch the abdomen out to enlarge the incision. Uh, if, if we didn't use paralyzing drugs, there would be reflex – reflex contraction of the abdominal muscles would stop the surgeons from opening up the incision. They'd have to make a much

longer incision, and that's
21 associated with a higher risk of infections and pain afterwards.
22 DAVID M. BARRON: In your opinion, if a person was conscious
23 would the use of a paralytic agent cause pain?
24 DR. MARK HEATH: Um, I'm not sure if "pain" is exactly the
25 right word. It would cause agony. Um, if a person is paralyzed
26 with one of these paralyzing drugs that we use, but not

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1 anesthetized, they are unable to, to breath and so they
2 suffocate. And along with that – I think we all agree that
3 suffocation when it comes, which is the endpoint, is an agonizing
4 experience. Along with that, um, would be terror because the
5 person would not be able to communicate that they were
6 experiencing this. There would hear voices around them talking,
7 and they would realize that the people in the room did not
8 realize they were awake. That's an awful, uh, for patients
9 that experience that, it's an absolutely experience.

DAVID M. BARRON: Is that an opinion you hold to a reasonable degree of medical certainty?
DR. MARK HEATH: With a very high degree of medical certainty.
DAVID M. BARRON: Would a layperson be able to observe that a person is conscious if they are paralyzed, just by looking at them?
DR. MARK HEATH: Uh, no, they would not be able to. It would be difficult for a professional to tell just by looking at the person.
DAVID M. BARRON: Would an anesthesiologist be able to tell by looking at them?
DR. MARK HEATH: Well, there is an array of cues or clues that might indicate it, but none of them actually prove it. But there are things that we look for to help us gauge anesthetic depth. So, for example, people who are paralyzed can still create tears and those tears can still run out of their eyes

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and down the side of their face. So if we see what we call

"lacrimation," which is in another word for tearing, then that's an indication that a person might be inadequately anesthetized. There are other things that we look for, um, elevations in blood pressure, elevations in heart rate. These things would happen to a person who is not paralyzed and in pain or suffocating, and they happen to a person who is paralyzed and in pain or suffocating.

DAVID M. BARRON: That's a lot of information, so I'm going to try to break it down –

DR. MARK HEATH: I'm sorry.

DAVID M. BARRON: –one by one.

DR. MARK HEATH: Yes.

DAVID M. BARRON: How would a paralyzed person be able to shed a tear?

DR. MARK HEATH: Uh, the paralyzing drugs don't affect all muscles. In fact, they don't affect the muscles that we have no control over. They only affect the muscles that we control. So paralyzing drugs don't paralyze our hearts. That's – if they did paralyze the heart, we couldn't use them in surgery. Paralyzing drugs don't paralyze, uh, muscles that, that cause the intestines

to contract. Paralyzing drugs don't paralyze the uterus or the
cervix. So – and similarly, they don't paralyze the muscles that
help, uh, promote lacrimation, and they don't paralyze the glands
from releasing tears.

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DAVID M. BARRON: Would a conscious person who's paralyzed
always shed a tear?
DR. MARK HEATH: No, I don't believe so. I'm not quite – I'm not certain about that. I
expect that some people don't.
DAVID M. BARRON: Why is that?
DR. MARK HEATH: I'm only just going on, on, on my
experience now: I don't have any literature to – to prove that
assertion. But I believe that probably many people would, would
shed tears but not all people.
DAVID M. BARRON: How do blood pressure cuffs help you
monitor whether somebody is conscious?
DR. MARK HEATH: Well, when somebody is conscious, and if
somebody were – were to be conscious and paralyzed, they would
very afraid. And if they were in surgery, they would be in great
pain. Or if they were not on a ventilator,

they would be
16 suffocating. And when those horrible things are occurring, in
17 most people, the blood pressure goes up and the heart rate go up.
18 And so a blood pressure cuff which tells us – or a blood pressure
19 monitor which tells us that heart rate and blood pressure would
20 be very informative.
21 DAVID M. BARRON: What are the other ways to monitor?
22 DR. MARK HEATH: Monitor?
23 DAVID M. BARRON: For conscious paralysis.
24 DR. MARK HEATH: So looking at the EKG which tells us about
25 the heart rate. Um, looking at the patient's skin, people – just
26 as a person who's not paralyzed if they are in pain or are in

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1 terror will tend to sweat, a person who's awake in the operating
2 room under, under surgery, but paralyzed, will generally still
3 sweat. Also, the pupils tend to enlarge. Just like a person who
4 is not paralyzed, fear and pain make the pupils get bigger, and
5 so we can check for that, too. There is also some relatively new

devices that monitor the electrical activity of the brain and allow one to make, um, or can provide inferences about the level of consciousness or the depth of anesthesia.

DAVID M. BARRON: What is that monitoring device that you just mentioned called?

DR. MARK HEATH: There are several different companies that make them. There's, uh, probably the best well-known one is called a BIS monitor, B-I-S monitor.

DAVID M. BARRON: Specifically, how does that monitor help you determine if somebody is consciously paralyzed?

DR. MARK HEATH: Uh, there are electrical leads that are attached to the, to the head. They monitor the electrical activity of the brain. And there are some characteristic changes in the electrical activity of the brain that correlate with level of consciousness. So the BIS monitor provides what is called an index that, um, in many instances, that can be used to give indications about the depth of anesthesia.

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DAVID M. BARRON: If you learned that a

person is conscious
during surgery, what would you do?
DR. MARK HEATH: A few things. I would as quickly as
possible administer drugs to stop them from – to render them
unconscious. And, uh, while I was doing that, I would talk to
the person and explain to them that, uh, I think that they – or I
know that they are awake and that, um, that – which is helpful to
do, because one of the most scary things about that situation is
the patient believes that nobody in the room knows that they are
awake. So I say that "I know that you are awake and that I'm
giving you drugs right now that will make you go back to sleep."
DAVID M. BARRON: What if any precautions or preparation do
you take prior to the surgical proce- – procedure beginning, to
ensure that conscious paralysis would not occur?
DR. MARK HEATH: That's a large array. It's myriad
different things, starting from having all the right equipment
properly set up in the operating room, to, uh, taking a careful
history and physical of the patient, to understand what their

medical issues are. And, uh, what their weight is, their – how they will respond to the drugs, whether there are other drugs that might influence their sensitivity to anesthesia. It's a very large array of things that one has to synthesize to make that determination.

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DAVID M. BARRON: I believe I heard you mention weight. What does a person's weight have to do with this?

DR. MARK HEATH: Oh, I, I think it is common sense that a large person requires more of virtually every drug, any drug including anesthetic drugs, than a small person. So we – mostly what we do, or many of the drugs we give, are dose-dependent by weight.

DAVID M. BARRON: What would happen if you gave someone too much anesthesia?

DR. MARK HEATH: The biggest problem with that is that many anesthetic drugs tend to lower the blood pressure, lower the heart rate. And if one really gets too much, it can cause

hemodynamic collapse and even death. The other problem with giving too much anesthesia is that it can take too long for the patient to wake up at the end of the procedure.

DAVID M. BARRON: What would happen if you gave too little?

DR. MARK HEATH: Um, if the patient is not paralyzed, then they'll jump off the operating room table and scream. If the patient's paralyzed, then they'll experience intra-operative awareness which is a heinous thing.

DAVID M. BARRON: Now let's move on to lethal injection. Have you testified in court before on lethal injection?

DR. MARK HEATH: Yes, I have.

DAVID M. BARRON: In what states?

DR. MARK HEATH: In Georgia, Tennessee, Louisiana, and Virginia.

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DAVID M. BARRON: What caused you to become interested in lethal injection?

DR. MARK HEATH: Just chance really. I, one day at work, in your lounge, between cases, uh, happened to be reading an

article, I think, in USA Today, or another regular newspaper, describing the drugs or listing the drugs that were going to be used on the Timothy McVeigh execution. And it was on its face a very bizarre choice of or selection of drugs. And I remember asking a couple of the people I was sitting with in the lounge drinking coffee, you know, "Why would they use pentothal, why pancuronium?" And everybody was like –

DAVID A. SMITH: Objection, Your Honor.

JUDGE ROGER CRITTENDEN: Wait, wait. Just go ahead and let him testify. Go on. You asked why would they use that, okay.

DR. MARK HEATH: I asked my colleagues, too, and we had a discussion about it. And, uh, that was the beginning of my interest in – should I go on with how it led to –

DAVID M. BARRON: Dr. Heath –

DR. MARK HEATH: Yes.

DAVID M. BARRON: – what is it about those chemicals that seemed peculiar to you?

DR. MARK HEATH: Uh, many things. As anesthesiologists, we tend to kind of to group our drugs by duration of action. And they had chosen an ultra-short-acting

barbiturate, thiopental, or
25 pentathlon as it is often called, very-short-acting drug, combine
26 it with a very-long-acting drug, pancuronium. That's generally

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1 not how one would want to do things. They've also chosen a drug
2 for stopping the heart, potassium, which is an extremely painful
3 way of stopping the heart. There are many non-painful ways of
4 stopping the heart that would achieve the same end.
5 DAVID M. BARRON: When preparing for your testimony today,
6 what documents concerning lethal injection in Kentucky have you
7 reviewed?
8 DR. MARK HEATH: I've read several different iterations of I
9 guess what might be called the protocol or protocols for lethal
10 injections, um, the most recent being, uh, December of 2004. And
11 I read some documents from the, uh, Harper execution, and some
12 EKG tracings and things like that related to that execution.
13 DAVID M. BARRON: Do you recall how many chemicals Kentucky
14 uses in lethal injection?

DR. MARK HEATH: I do, yes.
DAVID M. BARRON: How many?
DR. MARK HEATH: It uses three different chemicals.
DAVID M. BARRON: What are the names of those chemicals?
DR. MARK HEATH: The first one is called, uh, thiopental.
It is also called know as pentothal, and as sodium thiopental.
The second drug is called pancuronium, and it's also known as
Pavulon. And the third chemical or drug is potassium chloride.
DAVID M. BARRON: Are those the same drugs that you believed
to be peculiar from your research into the McVeigh execution?
DR. MARK HEATH: It is the same set of chemicals that, yeah,
attracted my attention.

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MALE VOICE: Have you administered any of these chemicals in
a surgical setting?
DR. MARK HEATH: I've administered all of them in surgical
settings.
DAVID M. BARRON: Under what type of circumstance?
DR. MARK HEATH: Many, many times. Um, again, for, for

providing general anesthesia for surgical cases, I've given, uh, thiopental for inducing anesthesia and pancuronium for maintaining paralysis during anesthesia. And potassium chloride is in the IV fluid, it's the salt that's in the IV fluid that virtually every patient gets.

DAVID M. BARRON: Do you give them in combination in surgery?

DR. MARK HEATH: Um, I'm not sure what – they're never given at exactly the same time, but they are – I will give all three of them in the same surgery, during the same procedure, but not at exactly the same time.

DAVID M. BARRON: Okay. Let's break each one of these chemicals down for a bit, one by one. The first chemical in Kentucky, what is that one again?

DR. MARK HEATH: Thiopental or pentothal.

DAVID M. BARRON: What's the general purpose of it in surgery?

DR. MARK HEATH: Uh, but it is rarely used now. Fifteen years ago, when I began my training, it was used ubiquitously. Uh, but now, we can – the area of the

country where I work and

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probably the whole country it's very I think quite rarely used now. But it's used for what we call the induction of general anesthesia, taking the patient from being awake to being anesthetized.

DAVID M. BARRON: Why is it rarely used today?

DR. MARK HEATH: It's been supplanted by a different drug called Propofol that's got somewhat more safer and convenient and better attributes.

DAVID M. BARRON: You say "safer." In what way?

DR. MARK HEATH: Uh, it's got a slightly more convenient time course of onset and offset and affects on, uh, vital signs and things like that. Just, it's just a little bit of an easier drug to work with. It's also, uh, uh, unlike pentothal, which has to be mixed up and reconstituted from powder, uh, which is extra steps and, uh, can slow things down and is an opportunity for causing – for having errors or mistakes, uh, Propofol comes

17 premixed so you can't – it's more rapidly drawn up into a syringe
18 and there's really no possibility of an error being made, or much
19 less possibility of an error being made.
20 DAVID M. BARRON: What would happen if thiopental came in
21 contact with another chemical such as pancuronium bromide?
22 DR. MARK HEATH: Well if the solutions of thiopental and
23 pancuronium mix, there's a phenomenon called precipitation where
24 the, uh, the thiopental can't stay in solution anymore and
25 instead of being dissolved like sugar is in water, it comes out

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1 of solution so that you'd see white, um, I guess not exactly
2 crystals, but white powder in the solution.
3 DAVID M. BARRON: Your Honor, may I have permission to mark
4 a document with instructions on how mix and label pentothal, for
5 identification purposes?
6 JUDGE ROGER CRITTENDEN: Sure.
7 DAVID M. BARRON: Thank you.
8 JUDGE ROGER CRITTENDEN: We're (inaudible).
9 DAVID M. BARRON: May I approach?
10 DAVID A. SMITH: Judge, I don't ever

recall seeing this in
discovery.
JUDGE ROGER CRITTENDEN: Has this been a part of discovery?
DAVID A. SMITH: Uh, if, if he's going to rely on this
document, we should have received this during discovery and at
disclosure. I don't ever recall seeing this document.
DAVID M. BARRON: May I briefly reply?
JUDGE ROGER CRITTENDEN: Yes.
DAVID M. BARRON: Uh, I just actually received this document
today, and it's actually –
DAVID A. SMITH: Objection, Judge.
DAVID M. BARRON: – results in response to testimony that
came out earlier in the proceedings yesterday. It actually also
corresponds and refers to – in reference to documents that they
disclosed on their own involving the bottles and how to mix the
chemicals. And on the document, there is actually one question
or one sentence that I am going to ask him about.

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JUDGE ROGER CRITTENDEN: Does the one sentence – well, why
don't you just ask him without admitting

the document. If you
haven't provided that to them in discovery, you can't admit the
document. So –
DAVID M. BARRON: Okay. That's fine. Dr. Heath, are you
familiar with how sodium thiopental, otherwise known as
pentothal, is mixed?
DR. MARK HEATH: I am, yes, although I have to say that
it's been – I rarely use it now, so I'm not what I call, um,
well-oiled or highly proficient in its mixture. But yes, I am
familiar.
DAVID M. BARRON: What kind of experience and training would
be necessary to mix it?
DR. MARK HEATH: I mean, at the, the first day of my
anesthesia training, the person who was teaching me showed me
exactly how to do it, you know, hands on, elbow-to-elbow.
DAVID M. BARRON: Would somebody who doesn't have experience
with intravenous anesthesia be able to mix pentothal without any
difficulty?
DAVID A. SMITH: I object. Speculation.
JUDGE ROGER CRITTENDEN: I will allow him to answer. Go
ahead.

DR. MARK HEATH: It just depends who the person is. I mean, most people in this room don't have experience administering intravenous anesthesia. I think they'd have a hard time mixing

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up this drug up reliably without somebody telling them exactly what to do.
DAVID M. BARRON: Now let's move to the second chemical used in Kentucky's lethal injection procedure. Or actually, I'm sorry, let me just back up for one second.
DR. MARK HEATH: Sure.
DAVID M. BARRON: Is thiopental an analgesic?
DR. MARK HEATH: It's an interesting question. It is somewhat debated in anesthesiologists – by anesthesiologists. Technically not, it's an anesthetic drug. It basically turns the nervous system or the brain off. Some people would say that when the brain is turned off, it can't experience pain and so, therefore, it has analgesic property. In very low doses, some people believe, and there's some literature that it actually

increases pain, so the opposite of an analgesic that can increase pain levels.

DAVID M. BARRON: What kind of chemical is the second chemical, pancuronium bromide?

DR. MARK HEATH: Uh, pancuronium bromide is a paralytic drug. It's also called a neuromuscular blocker because it blocks the signal that comes from a nerve or a neuro, the signal that goes to the muscle. It blocks that signal. So the nerve sends the signal, but the muscle never hears the signal and doesn't respond.

DAVID M. BARRON: What is the purpose of pancuronium bromide in a surgical setting?

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DR. MARK HEATH: I think I've just –

JUDGE ROGER CRITTENDEN: I think we've answered –

(Inaudible/mixed voices)

JUDGE ROGER CRITTENDEN: Let's, let's keep moving on.

DAVID M. BARRON: Okay. How long does pancuronium bromide in a 50-milligram dose last?

DR. MARK HEATH: Fifty milligrams? I, I don't think any

clinician would ever have experience with that. I'm going to extrapolate. I'll tell you that to induce an adult – to paralyze an adult, I would probably give seven milligrams and expect that to last for a couple of hours. So extrapolating, 50 milligrams is a little more than seven times seven milligrams. It would last for many, many hours.

DAVID M. BARRON: How long does a surgical dose of thiopental last?

DR. MARK HEATH: For the dose that we use to induce general anesthesia typically lasts for a couple of minutes.

DAVID M. BARRON: And if that begins to wear off, would a person start to feel pain at that point?

DR. MARK HEATH: They, yeah, that, that, that would be agonizing, but that's why we give – before the pentothal wears off, they give additional drugs or inhaled gases and things to keep – make sure the patient is asleep, when they are paralyzed.

DAVID M. BARRON: Does pancuronium bromide relieve pain?

DR. MARK HEATH: Absolutely not.

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DAVID M. BARRON: Do you a medical – an opinion to a reasonable degree of medical certainty as to whether pancuronium bromide in a conscious person would cause pain?

DR. MARK HEATH: Again, I'm not sure I want to use the word "pain." It would cause agony. It would be the experience of suffocating, of being locked into one's body unable to draw breath, despite desperately craving to draw breath. It would be terrify, because one would be locked in. Strictly speaking, it depends on whether or not you think suffocation is pain or not. But I think we all agree that it's agony.

DAVID M. BARRON: Okay, now narrowing to the chemicals in Kentucky's lethal injection, pancuronium bromide and sodium thiopental, could a person under the influence of those two chemicals in combination regain consciousness?

DR. MARK HEATH: Absolutely, yes.

DAVID M. BARRON: And why would that be?

DR. MARK HEATH: Again, if insufficient

or inadequate
18 pentothal was, um, administered or was circulating in the
19 bloodstream, then the person would by definition be – would not
20 be unconscious, they would be awake. Uh, and if there were
21 sufficient pancuronium to paralyze them, then by definition they
22 would be paralyzed, that you have by logical a conclusion and a
23 way to paralyze (inaudible).
24 DAVID M. BARRON: And going to the Kentucky execution
25 protocols, did you review both the 2004 revisions and the lengthy
26 redacted portion that is revised by those revisions?

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1 DR. MARK HEATH: I think I understand your question. I, I
2 read some, I think, two – I read three documents, I believe, two
3 revis- – two earlier ones and then the one from December 2004.
4 And I forget which ones were redacted but there was a fair bit of
5 redaction present.
6 DAVID M. BARRON: Based on your review of those protocols,
7 and your medical expertise, do you believe the Department of

Corrections uses the proper equipment to monitor for conscious paralysis during an execution?

DR. MARK HEATH: No, I don't.

DAVID M. BARRON: What equipment do you believe would be necessary?

DR. MARK HEATH: Well, I don't want to be in a situation of advising exactly how this should be done but I would say that in an operating room situation, um, to monitor for depth of anesthesia, uh, the American Society of Anesthesiologists requires that certain monitors be present, including a blood pressure cuff, an EKG, and also the ability to be – for a trained professional who knows how to assess anesthetic depth, being present right at the, at the bedside.

DAVID M. BARRON: And where is the EKG? Where should that be located if it was going to be used to monitor for consciousness?

DR. MARK HEATH: Well, it needs to be located where it's visible to a person who understands how to use it to help guide estimation of level of consciousness, and it's visible to a

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person who is able to intervene, if they see a problem, to intervene, as I described, by giving more anesthetic drugs.

DAVID M. BARRON: Would the EKG monitor being outside the Execution Chamber be sufficient to do that?

DR. MARK HEATH: Uh, no. Everything should be right at the, well, what, what I call the bedside, I guess, the gurney, everything should be right there, so that the personnel can interpret, um, view the monitors, interpret them, make any inferences that are warranted about level of consciousness, and then intervene as required.

DAVID M. BARRON: And to a lay witness, to any witness actually observing the execution, if you used pancuronium bromide as the only chemical, how would that appear to the person watching it?

DAVID A. SMITH: Your Honor, I object to the relevance of that question.

JUDGE ROGER CRITTENDEN: Using only pancuronium bromide?

DAVID A. SMITH: Yes.

JUDGE ROGER CRITTENDEN: I'll, I'll

sustain that. There's
20 no evidence that that will be the only drug that's used. I mean,
21 as a matter of fact, the evidence is the opposite that, so.
22 DAVID M. BARRON: Let me rephrase that then, please.
23 JUDGE ROGER CRITTENDEN: Okay.
24 DAVID M. BARRON: With the sodium thiopental and the
25 pancuronium bromide, and I'm talking prior to the injection of

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1 the potassium chloride, at that point, how would it appear to a
2 lay witness?
3 DR. MARK HEATH: You are asking me if a lay witness who
4 would be observing after the pentothal, after the pancuronium,
5 and before the potassium?
6 DAVID M. BARRON: Yes.
7 DR. MARK HEATH: Well, any person or animal who'd been given
8 pancuronium, they are going to appear serene and tranquil and
9 peaceful and comfortable, regardless of whether they are in fact
10 awake and in agony or whether they are deeply unconscious. The
11 appearance could be virtually identical. If somebody was very

close, they might notice sweating. Uh, but you'd have to be close to the person to be able to see that.

DAVID M. BARRON: The third chemical?

DR. MARK HEATH: You might also notice tearing. That could maybe seen from a few feet away, but as I said, I don't think that always happens when patients or people are, are paralyzed but conscious.

DAVID M. BARRON: Could that be seen if you were 11 feet away, the tearing?

DR. MARK HEATH: Perhaps, but it could be easily missed. Certainly one should not be standing that far away. One should really be right at the head of the bed, or, or head of the gurney. Yeah, again, one should do whatever reasonable things one can do to optimize one's ability to discern depth of

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anesthesia. So it is reasonable to be close. There's no harm in being close, so one would be close.

DAVID M. BARRON: The third chemical, potassium chloride, what kind of chemical is that?

DR. MARK HEATH: Potassium chloride is

a salt. Uh, we also
6 call it an electrolyte when it's in, in water or in the blood.
7 Um, and it's a, a salt that our body regulates very closely
8 because if the concentration of that potassium gets too high
9 or too low, it will stop the heart from working properly.
10 DAVID M. BARRON: What kind of reaction does potassium
11 chloride have within the body?
12 JEFF MIDDENDORF: Objection. Asked and just answered.
13 JUDGE ROGER CRITTENDEN: You know, I, I think we should go
14 on to what levels, I mean, unless there's something else. He
15 said either too high or too low, so.
16 DAVID M. BARRON: Let me ask, would it be, if, would
17 potassium chloride, if a person was conscious, be painful?
18 MALE VOICE: What?
19 DR. MARK HEATH: You're exactly right. It depends on the
20 concentration. We all have potassium chloride in our bodies.
21 Right now, we all have the right amount of it and our hearts
22 are all working nicely. If, if the concentration – a high
23 concentration of potassium enters the body then if there's a

nerve in that area, it will cause a tremendous amount of pain.
So, for example, injecting concentrated potassium into a vein,

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uh, causes an extraordinary amount of pain. That's well
documented in the medical literature.
DAVID M. BARRON: Would 240 milliequivalents cause pain?
DR. MARK HEATH: In concentrated form, it would be extremely
agonizing.
DAVID M. BARRON: To a reasonable degree of medical
certainly, would the dose of potassium chloride administered in
Kentucky lethal injection be sufficient in and of itself to cause
death?
DR. MARK HEATH: Yes, it would.
DAVID M. BARRON: Even without using sodium thiopental?
DR. MARK HEATH: Absolutely, yes.
DAVID M. BARRON: Even without using pancuronium bromide?
DR. MARK HEATH: Yes.
DAVID M. BARRON: So in your opinion, to a reasonable degree
of medical certainty, in Kentucky lethal injection, with their
three chemical combination, what chemical

is the killing agent?
DR. MARK HEATH: Potassium chloride, or specifically the
potassium in the potassium chloride.
DAVID M. BARRON: So to a reasonable degree of medical
certainty, what is the purpose of pancuronium bromide as used in
Kentucky's lethal injection?
DR. MARK HEATH: I don't think it has a legitimate purpose.
In fact, my understanding of the goals in an execution are,
number one, to render the condemned inmate dead, and number two,
to do so in a humane fashion. And the drug that renders the

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inmate dead is the potassium and the drug that's supposed to make
it humane is the pentothal. The pancuronium achieves neither of
those things. It can't possibly make it more humane and, uh,
it's not the drug that kills the inmates.
DAVID M. BARRON: To a reasonable degree of medical
certainty, would using thiopental and potassium chloride be more
painful than using the three chemicals that are currently used in
Kentucky's lethal injections?

DR. MARK HEATH: No, it would, it would not be more painful.
DAVID M. BARRON: Would it be less painful?
DR. MARK HEATH: There's certainly the potential. In some situations, it would be much better to have not given the pancuronium. So, yes. Again, I would use the word, uh, "agony" more than "pain."
MALE VOICE: What is that again?
DR. MARK HEATH: You are asking about omitting pancuronium. That would eliminate the possibility of conscious paralysis.
DAVID M. BARRON: I would like to show you a copy of what's already been entered into evidence as Plaintiffs' Exhibit #1, which is the 2004 revisions of Kentucky's execution protocol. May I approach the witness?
JUDGE ROGER CRITTENDEN: Yes, go ahead.
DAVID M. BARRON: Can you tell me have you seen that document before?
DR. MARK HEATH: Yes, I have.

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DAVID M. BARRON: Did you review it in preparation for your

testimony today?
DR. MARK HEATH: I did, yes.
DAVID M. BARRON: I'd like to refer you to page 5 of the
section entitled "Lethal Injection." In fact, it's page 5 of 9.
DR. MARK HEATH: How far back in the package is that?
Actually, I have two of nine.
DAVID M. BARRON: It would be three pages after that. Or
actually, go back to page 4 for a second, of that – that's it.
DR. MARK HEATH: Okay.
DAVID M. BARRON: Now I'd like you to look at #16. Can you
tell us if that section lists the chemicals that are used in
Kentucky's lethal injection?
JUDGE ROGER CRITTENDEN: You know, I, I don't want to
belabor this point. He, he's, he already knows the chemicals
that are used. We don't need to ask it three or four times.
He's testified about it. So I –
DAVID M. BARRON: I was trying to make sure –
JUDGE ROGER CRITTENDEN: Well, I think – I think we all know
it. If we didn't know them, we wouldn't be here today. So let's
go ahead.
DAVID M. BARRON: Okay. After the first

chemical is
23 administered, does #16 mention saline?
24 DR. MARK HEATH: Yes, it does.
25 DAVID M. BARRON: What concentration of saline is being
26 administered?

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1 DR. MARK HEATH: Well, it says to give 25 milligrams or
2 "25 mgs" of saline – 25 milligrams, but that's absurd. So I
3 can't believe that that's really happening in the procedure.
4 DAVID M. BARRON: Absurd? Why is that?
5 DR. MARK HEATH: Um, a miliigram is 1,000th of a gram.
6 They're, they're trying to give milliliters, here, 25 milliliters
7 of saline, I'm, I'm pretty sure. And 25 milligrams would be one
8 – 1/40th of that amount. They're off by a factor of 40 from what
9 I think they're trying to do. And it. it's also problematic
10 because one needs to inject many cc's of saline between the
11 pentothal and the pancuronium or this precipitation problem will
12 occur we were discussing earlier.
13 DAVID M. BARRON: What would happen if they precipitated?

DR. MARK HEATH: It could clog up the IV probably and the pentothal wouldn't – you know, it would screw up the, the whole rest of the procedure after the precipitation.

DAVID M. BARRON: Does that mention of the 25 milligrams of saline appear again in between pancuronium bromide and potassium chloride?

DR. MARK HEATH: Yes, Step 4.

MALE VOICE: Thank you. Read the document.

DAVID M. BARRON: Now, Dr. Heath, I'd like to talk to you a little bit in more about detail about an EKG. Can you tell us what that is used for?

DR. MARK HEATH: Sure. Uh, EKGs are a device for monitoring and recording the electrical activity of the heart.

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DAVID M. BARRON: What training have you received in reading EKGs?

DR. MARK HEATH: Quite a bit. It starts off in medical school and then, you know, virtually, the great majority of cases that I care for have EKGs. I'm constantly watching the EKG

during, during surgery, during anesthesia. Um, the training is extensive, especially as I'm a cardiac anesthesiologist.

DAVID M. BARRON: In preparation for your testimony today, did you review a DoC document stating the times each chemical were injected into Mr. Harper?

DR. MARK HEATH: Yes, I did.

DAVID M. BARRON: Your Honor, may I approach the witness?

JUDGE ROGER CRITTENDEN: Please.

DAVID M. BARRON: Let the record reflect I'm showing him what's been previously entered into evidence as Plaintiffs' Exhibit #3.

DAVID M. BARRON: Take a moment; tell us if you've reviewed that document?

DR. MARK HEATH: Yes, I've reviewed all three of these pages.

DAVID M. BARRON: Does one of those pages mention the times the chemicals were injected into Mr. Harper?

DR. MARK HEATH: Yes.

DAVID M. BARRON: Tell us what time thiopental was administered?

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DR. MARK HEATH: It looks like it's administered, and it says first round and second round, starting at 7:16. Uh, there's been some scribbling there but it pretty – it's 7:16 p.m., obviously, we know from when the inmate entered the Execution Chamber. And another round at 7:18 p.m., so basically over a two-minute interval. Perhaps a bit longer than two minutes.

DAVID M. BARRON: Is there any significance to the difference in time, the two-minute lapse between the two?

DR. MARK HEATH: Well, I'm not sure what kind of clock they were looking at, but it could easily have taken well over two minutes and still have recorded these times. It's a – they're injecting pentothal over a very long time period.

DAVID M. BARRON: What time was the pancuronium bromide administered?

DR. MARK HEATH: At 7:19.

DAVID M. BARRON: And just for clarification, pancuronium bromide is referred to by any other names?

DR. MARK HEATH: Pavulon.
DAVID M. BARRON: And how is it referred to in that document?
DR. MARK HEATH: Pavulon.
DAVID M. BARRON: What time was the third drug, potassium chloride, administered?
DR. MARK HEATH: Uh, again, the same thing. It shows an {e-pockets} from between 7:20 p.m. and 7:22 p.m.

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DAVID M. BARRON: In preparation for your testimony, did you also review an EKG printout from the Harper execution?
DR. MARK HEATH: I did, yes.
DAVID M. BARRON: Your Honor, may I approach the witness?
JUDGE ROGER CRITTENDEN: Please.
DAVID M. BARRON: I'd like the record reflect that I am showing Dr. Heath what's already in evidence as Plaintiffs' Exhibit 5, Harper's EKG. Can you tell us if you reviewed that document?
DR. MARK HEATH: I have, yes. I think it was a, actually, a better copy than this, but I have.
DAVID M. BARRON: Based on that EKG,

what time did Eddie
13 Harper die?
14 DR. MARK HEATH: Okay, a few seconds after 07:21 p.m., 19:21
15 or 07:21 p.m.
16 DAVID M. BARRON: Well does that mean that the thiopental,
17 pancuronium bromide, and potassium chloride all entered his body
18 at that point, in some quantity?
19 DR. MARK HEATH: We know from the record that there was an
20 administration of the other drugs prior to – to the potassium –
21 we trust – if we take the record at face value. What we see here
22 is that – the thiopental going in, the pancuronium going in, and
23 not a whole lot happens to the EKG tracing. And then shortly
24 after the onset of the potassium administration, there's a major
25 changes in the EKG tracing that makes that basically means the
26 heart has stopped beating.

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1 DAVID M. BARRON: Can you describe for us what changes, if
2 any, occurred at 7:19 p.m. on the EKG?
3 DR. MARK HEATH: Nothing – nothing stands out. There's,
4 there's always minor irregularities in

anybody's EKG tracing of
heart rate, um, unless they have the pacemaker and that's – those
minor irregularities continue through 7:19.
DAVID M. BARRON: Can you tell us what, if any, changes
occurred in his heart activity up until the pancuronium bromide
was injected?
DR. MARK HEATH: Well, so the pancuronium was at 7:19. Do
you want to know before then?
DAVID M. BARRON: Before then, yes.
DR. MARK HEATH: I'm only looking at half of the pages here,
but things are basically pretty steady up through 7:19, through
the administration of the Pavulon, the pancuronium.
DAVID M. BARRON: What if any changes occurred when the
potassium chloride was injected?
DR. MARK HEATH: So the potassium chloride injected at
7:20, and it's pretty to see, uh, shortly thereafter the tracings
start to change shape and it – basically the rhythm rapidly,
uh, deteriorates and collapses into a rhythm that would not be
compatible with pumping blood.
DAVID M. BARRON: So to a reasonable degree of medical
certainty, which chemical killed Eddie

Harper?
DR. MARK HEATH: Potassium chloride, or really the potassium
In the potassium chloride.

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DAVID M. BARRON: Do you know if thiopental is used in the
euthanasia of animals?
DR. MARK HEATH: Very, very rarely, if ever.
DAVID M. BARRON: Why is that?

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DR. MARK HEATH: Um, there are much better drugs for
achieving the goal of euthanasia than thiopental.
DAVID M. BARRON: Uh, do you know if there are any risks
associated with using thiopental to euthanize an animal?
DR. MARK HEATH: Well, one of the issues is that it's a
ultra-short-acting drug. Uh, that's certainly a concern and it
makes much more sense, uh, and what is done is to use is a much
longer-acting drug.
DAVID M. BARRON: Does that concern you just mentioned also
exist with human beings using thiopental?

DR. MARK HEATH: Yes, it does.
DAVID M. BARRON: What about using pancuronium bromide to euthanize an animal?
DR. MARK HEATH: That's prohibited. One of the things I have to learn about is the thing called the "AVMA Guidelines." AVMA stands for American Veterinary Medical Association. And as somebody who does animal research, I have to understand what those guidelines say about euthanasia. And, uh, paralyzing an animal without it giving it anesthesia is, um, is I think actually criminal, not just –
DAVID A. SMITH: Judge, we object. I don't believe that's what the testimony was.
JUDGE ROGER CRITTENDEN: I'll, I'll (inaudible), well, what the vet testified to today is, is just by avowal anyway. But he can, he can testify as to what, what he knows about.

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DR. MARK HEATH: It's my understanding in many states it's against the law, um, to, to do that. Certainly, no – nobody would ever do that on purpose unless they

wanted to
be cruel to the animal.
DAVID M. BARRON: Do you know how animals are euthanized?
DR. MARK HEATH: I –
JUDGE ROGER CRITTENDEN: Well, he can tell how he euthanizes animals.
DR. MARK HEATH: Yes. It depends on the animal and the situation. Uh, if, if one is, for example, doing a surgical experiment on a, on a dog or a sheep, and at the end of the – that surgical experiment one wants to euthanize the animal, um, typically a, a large dose of a longer-acting barbiturate like pentobarbital is given in combination with a drug that painlessly stops the heart.
DAVID M. BARRON: Now, you said a few moments ago that you are familiar with the American Veterinary Medication Association.
DR. MARK HEATH: Not so much the Association but the document – their document about euthanasia.
DAVID M. BARRON: And again, how did you become familiar with that?
DR. MARK HEATH: Um, when we do animal research, we have to

know about animal care, and part of animal care is how to end an animal's life humanely when one – when the experiment is completed.

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DAVID M. BARRON: Your Honor, may I have permission to mark the AVMA Euthanasia Report as Plaintiffs' Exhibit 12?

JEFF MIDDENDORF: Objection, Judge. That came in by avowal. He's, he's a physician; he is not a veterinarian. This is a backdoor trying to –

JUDGE ROGER CRITTENDEN: He can testify as to what he knows. He, he – we're not going to admit the document. We'll – the document will stay in by avowal, but that's, that's all. Unless you want the – unless you want the Defendants to ask him about killing sheep by shooting them in the head, let's go on.

DAVID M. BARRON: What do the American Veterinary Medical Association standards say about using a barbiturate and a neuromuscular agent together?

DR. MARK HEATH: If the barbiturate they talk about is

pentobarbital, um, that's because there's just no occasion to use other – to use thiopental. But they say that, uh, pentobarbital and a neuromuscular blocker such as pancuronium cannot be used for, for, for euthanasia. I think they say it's to be condemned or some such strong language. I forget exactly.

DAVID M. BARRON: To a reasonable degree of medical certainty, do you believe Harper's execution was conducted in conformance with the AVMA standards?

JEFF MIDDENDORF: I object to its relevancy.

JUDGE ROGER CRITTENDEN: I'll sustain. I will sustain.

DAVID M. BARRON: According to the Kentucky protocol, how many doses of thiopental are administered?

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DR. MARK HEATH: The, the sheet shows two rounds, I believe a single dose one after the other. It depends on semantics whether one calls that one dose or two doses that are immediately connected to each other.

DAVID M. BARRON: During a surgical procedure, how many

doses of an anesthetic do you administer?
DR. MARK HEATH: Of an anesthetic or –?
DAVID M. BARRON: Yes.
DR. MARK HEATH: We, we give multiple different kinds of anesthetic typically during a general anesthesia case. I might give a single dose of Propofol, which is the replacement drug of pentothal to induce anesthesia, and then give other anesthetic drugs to maintain anesthesia. For example, continuous inhalation of an anesthetic gas or intravenous injections of longer-acting drugs that help support anesthesia.
DAVID M. BARRON: Is there ever a point where you stop administering anesthetic during the surgical procedure?
DR. MARK HEATH: Yes, there is. That would be the time where one's anticipating that the surgery is going to be over soon, and one stops administering drugs, turns off the gas that's keeping the patient asleep. And those drugs take some time to wear off, so one wouldn't turn them off generally or turn them down before the surgery is actually finished. It's sort of like bringing a plane in for a landing.
DAVID M. BARRON: So are you saying

that up until that point
26 the anesthetic drug is continuously administered?

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1 DR. MARK HEATH: Yes.
2 DAVID M. BARRON: Do you have an opinion as – to a
3 reasonable degree of medical certainty, as to whether the lack
4 of a continuing flow of thiopental creates an unacceptable risk
5 that an inmate may be conscious during an execution?
6 DR. MARK HEATH: Well, it increases the risk.
7 DAVID M. BARRON: Why is that?
8 DR. MARK HEATH: If an, if an inadequate dose of pentothal
9 is administered, and it were to be followed by an infusion of
10 pentothal, that would tend to make the inmate less aware, less
11 conscious. The failure to give a continuous infusion of it, um,
12 if the initial dosage is insufficient, the inmate is going to
13 wake up.
14 DAVID M. BARRON: To a reasonable degree of medical
15 certainty, could the risk of pain and suffering be lessened
16 through the use of different chemicals and

procedures in carrying
17 out lethal injections?
18 DR. MARK HEATH: Absolutely.
19 DAVID M. BARRON: How do you know that?
20 DR. MARK HEATH: There are drugs that could replace all the
21 drugs that are being used for this lethal injection that would
22 carry a much lower risk of causing pain or suffering, much lower
23 risk of an error in administration, much, much lower risk of
24 things going wrong.

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1 DAVID M. BARRON: Dr. Heath, let's talk briefly about
2 inserting an IV needle. Would a person, by merely observing a
3 patient, always know if there is swelling at the IV site?
4 DR. MARK HEATH: I think if I can answer this way: One
5 needs to know if an IV is properly inserted into a vein so that
6 any drugs that are injected into the IV would be carried into the
7 vein, into the circulation, and delivered to their target organs,
8 whether it be the brain or the heart or whatever. By looking
9 at it, that one can get some information: one

can look from a
10 close distance about whether the IV site is working, but that's
11 sufficient in and of itself.
12 DAVID M. BARRON: What else would a person need to do?
13 DR. MARK HEATH: Well, there are checks that we do, opening
14 up the IV fluid, opening up the flow regulator, or injecting a
15 fluid; sensing how much resistance there is to injection of the
16 fluid; looking for swelling or – around – near the IV site;
17 feeling with palpitation, which is just another way of saying
18 touching or feeling the site where the IV is to see if it's a
19 different temperature, which happens when the room temperature
20 IV fluid goes into the warm body.
21 DAVID M. BARRON: What kind of problems can go wrong in
22 inserting an IV?
23 DR. MARK HEATH: The IV can be not inside the vein. It can
24 be, uh, outside the vein, it can be in an artery or in a nerve or
25 in fat or muscle surrounding the veins.

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1 DAVID M. BARRON: How does, if at all, the size of the

catheter used affect this?
DR. MARK HEATH: I guess that's part of the art of it. One
inspects test the patient's veins, picks the – a good site, and
then in ones head, sizes up what the ideal catheter is to get
into that, that vein. It's hard to explain just. It's just, uh,
something that comes out of experience.
DAVID M. BARRON: How do you monitor for these types of
problems?
DR. MARK HEATH: For which type of problems?
DAVID M. BARRON: Problems with inserting IV needles. Once
they are – you stick a needle in the body.
DR. MARK HEATH: Right.
DAVID M. BARRON: How do you monitor at that point to know
that it's been properly (inaudible).
JEFF MIDDENDORF: I, I object, Your Honor. I think the man
answered this a minute ago.
JUDGE ROGER CRITTENDEN: How do you monitor whether the
solution is going in or not, or how do you monitor if it's not
going in?
DAVID M. BARRON: The first set of questions involved the
actual insertion of the IV.
JUDGE ROGER CRITTENDEN: Okay.

DAVID M. BARRON: I'm moving to the next step. Once the IV is already on the arm, how do you monitor to make sure that the IV has stayed in the vein?

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DR. MARK HEATH: So one needs to be right at the bedside, as it were. I'd generally be standing with my – you know, hips – if the patient will be on a bed at waist level and my hip will be, you know, within one or two feet of where the, where the IV site is so I can look right down on it and see if there's any leaking or swelling, uh, to, to see how the fluid is flowing.

DAVID M. BARRON: Your Honor, may I approach the witness?

JUDGE ROGER CRITTENDEN: Please.

DAVID M. BARRON: For the record, I'm showing you a copy of Plaintiffs' Exhibit #1, Kentucky's 2004 revisions. Take a moment and turn to page 9 of the section entitled "Execution, Lethal Injection."

DR. MARK HEATH: Okay.

DAVID M. BARRON: Can you look at #5 and read that out loud, please?

DR. MARK HEATH: I'm sorry, I'm looking at the wrong page, I have –

JUDGE ROGER CRITTENDEN: I have #27, 28, 29, that's what I have on, on Plaintiffs' Exhibit 1, on page 9.

DAVID M. BARRON: One second. I'm sorry, my mistake, on the numbering; page 2, #5.

JUDGE ROGER CRITTENDEN: Page 2 of 9?

DAVID M. BARRON: 2 of 9 on "Execution, Lethal Injection," and we're looking at #5, the first enumerated part of that document on that page.

DR. MARK HEATH: Okay, yes.

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DAVID M. BARRON: Can you read #5 to the Court, please?

DR. MARK HEATH: Number 5 says, "To best assure that a needle is inserted properly into a vein, the IV team members should look for the presence of blood in the valve of the sited needle."

DAVID M. BARRON: Can you explain how that would tell if the needle was inserted properly?

DR. MARK HEATH: It really doesn't make any sense at all.

There is no valve in the sited needle and, uh, while that's one of many things one needs to do to help understand if the catheter is in the right place, uh, by itself, it's certainly not sufficient. Um, it's also just a bizarre thing to put in there, to be explaining in this way to the IV Team how do be putting the catheter in, or how to know where the catheter is. It would be like if I were, you know, putting my kid onto a school bus and the driver had a sign in front of him saying, you know, "To turn right, turn the steering wheel to the right, or "To brake, press on this pedal." It's just a bizarre thing to put in there if the people who are doing it are, are proficient and experienced in the procedure.

DAVID M. BARRON: Could you turn to page 2 of the same document, under the section entitled "IV Team Checklist"?

JUDGE ROGER CRITTENDEN: You're on?

DR. MARK HEATH: I'm on page 2 now.

DAVID M. BARRON: Well, we have – the way this is organized, we have documents that are labeled "Execution by Lethal

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Injection," which is a – has nine pages to it. There is also a separate part of the insert put together called "IV Team Checklist.

JUDGE ROGER CRITTENDEN: That's Plaintiffs' 2?

DAVID M. BARRON: No. I don't – I believe it's part of Plaintiffs' Exhibit 1 because Plaintiffs' 2 is 19 –. Isn't #2 from 1999?

JUDGE ROGER CRITTENDEN: Revised 04/09/98.

DAVID M. BARRON: Yes. I'm referring to the one that's revised December 14th, 2004, which should be part of Exhibit 1. I mean, Exhibit 1 has an "Execution by Lethal Injection" section, a "Pre-Execution Medical Action Checklist."

JUDGE ROGER CRITTENDEN: My Exhibit 1 only has the nine or ten pages of the Execution Lethal Injection, revision, 12-14.

DAVID M. BARRON: Well, then, I need to – one second here.

JUDGE ROGER CRITTENDEN: Two is the "IV Team Checklist."

JUDGE ROGER CRITTENDEN: Now it may be a part of, uh, where

did we see those, #8?
DAVID M. BARRON: Actually, could we approach the bench, please?
JUDGE ROGER CRITTENDEN: Um-hm [yes], (inaudible) together.
DAVID M. BARRON: Let's try to clarify we have the documents that I thought. So –
THEODORE S. SHOUSE: It might not have come as –
JUDGE ROGER CRITTENDEN: I know what I have, because I have what you all gave to me.

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(Inaudible/mixed and muffled voices)
THEODORE S. SHOUSE: Do you have the document, Judge, under anything, entitled "IV Team Checklist"?
JUDGE ROGER CRITTENDEN: I have that document right here.
DAVID M. BARRON: That's the old one. We're referring to this document.
(Inaudible/mixed and muffled voices)
JUDGE ROGER CRITTENDEN: It's not under 1 and 8 is whatever 1 is (inaudible).
DAVID M. BARRON: Eight is in the redacted.
SUSAN J. BALLIET: Eight is 2002. Eight is the 2002, big

thick (inaudible).
JUDGE ROGER CRITTENDEN: Yes.
SUSAN J. BALLIET: The – what you're looking for should be attached to the back of Plaintiffs' 2. If it's not, I think –
DAVID M. BARRON: Can you – I'm sorry. (Inaudible/mixed voices)
JUDGE ROGER CRITTENDEN: Attached to the back of Plaintiffs' 2?
DAVID M. BARRON: Plaintiffs' 1, I'm sorry. Plaintiffs' 2 is the old version.
SUSAN J. BALLIET: Yes, Plaintiffs' 1. And if you didn't get it –
JUDGE ROGER CRITTENDEN: There's one that says "revised 99."
(Inaudible/mixed voices)

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DAVID M. BARRON: Plaintiffs' 1 should include only 2004 revisions.
(Inaudible/mixed and voices)
DAVID M. BARRON: Court's indulgence, we'll provide a copy (inaudible).
JUDGE ROGER CRITTENDEN: Thank you. . We'll go with that, fine. (Inaudible)
DAVID M. BARRON: Dr. Heath, does your

copy have a section
9 entitled "IV Team Checklist"?
10 DR. MARK HEATH: It does, yes.
11 DAVID M. BARRON: Okay. Can you turn to page 2 of that?
12 DR. MARK HEATH: I don't have the page numbers, so why don't
13 you tell me what section?
14 DAVID M. BARRON: May I approach the witness to clarify
15 this?
16 JUDGE ROGER CRITTENDEN: Please, yes.
17 DAVID M. BARRON: Thank you.
18 DR. MARK HEATH: There it is. Okay, 2 of (inaudible).
19 DAVID M. BARRON: Would you look at #6, please, and read
20 that to the Court.
21 DR. MARK HEATH: It says, "The members of the IV Team shall
22 prepare two sets of execution chemicals in 60cc syringes. The
23 syringes shall be properly labeled and stored in, in the
24 dispensing tray. The syringes shall be guarded by a member of
25 the Execution Team until they are administered to the
26 condemned."

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1 DAVID M. BARRON: Can you explain

what a cc is?

DR. MARK HEATH: cc stands for a cubic centimeter.

DAVID M. BARRON: How does that relate to volume?

DR. MARK HEATH: It's a measure – it's a measure of volume.

DAVID M. BARRON: So what does this portion of the protocol tell you about whether the IV is being properly inserted and whether the chemicals are properly injected?

DR. MARK HEATH: Well, it doesn't tell me what concentrations of drugs are being given. I've looked at protocols from many, many states, almost all the states that do lethal injection, and they usually have a lot more detail about how this drug is made up, the concentration that will be in the syringe, the number of syringes, the volumes in the syringes.

DAVID M. BARRON: Why is the concentration that would be in the syringe be important to ensuring that the quantity of chemicals they are trying to inject reaches the inmate?

DR. MARK HEATH: Well, getting the right amount of chemical in is a matter of knowing the concentration

and the volume. One
19 has to get the right volume at the right concentration to achieve
20 the, the right level in the end. So not having instructions
21 about how to do that makes it hard to interpret.
22 DAVID M. BARRON: So, let's, let's take the three-gram
23 amount that they currently have in their protocol. If that is,
24 okay, if the concentration is mixed improperly based on the
25 section you just read, does that change how much of that three
26 grams will get into the inmate?

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1 DR. MARK HEATH: Yes, it would.
2 DAVID M. BARRON: In what way?
3 DR. MARK HEATH: If the concentration's too low and you give
4 the same volume, then you're giving a lower amount of drug.
5 DAVID M. BARRON: So the concentration, is the, is that,
6 would you say that, to a medical degree of certainty, the
7 concentration of a drug being injected is a factor that should
8 be considered, rather than just the gram amount, in determining
9 whether the chemical would render

somebody unconscious?

DR. MARK HEATH: Ultimately what matters is how many grams or the quantity that enters the circulation and is distributed. Um, but not knowing, uh, like I said, most protocols specify the volume and the concentration so that one can know how it's being done. And this is very, uh, scant or superficial in – by comparison.

DAVID M. BARRON: Let me retrieve the document.

DAVID M. BARRON: Dr. Heath, how long should it take to insert an IV?

DR. MARK HEATH: Generally, it takes a couple of minutes. In most people it's pretty easy. You can see a – see a vein and put the catheter in, it's done. Two or three minutes.

DAVID M. BARRON: What would you do if you spent 10 minutes trying to insert an IV and couldn't get it in?

DR. MARK HEATH: Well, it, it definitely happens. Um, I might keep trying after 10 minutes. I might, uh, ask somebody, you know, ask a colleague. Everyone has their own approaches

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and sometimes their approach might be better than mine for an individual patient.

DAVID M. BARRON: What about if after 20 minutes you still couldn't get it in?

DR. MARK HEATH: I'd be very frustrated. Um, the patient would be in a lot of discomfort or pain and frustrated. Um, I might try to give the patient some inhaled gas – gas from a mask, which I could do without them having an IV in, um, to make them more comfortable. I might, you know, ask for help from another colleague or whatever, be looking around on the patient's body for – trying to find a good IV site.

DAVID M. BARRON: What about 60 minutes?

DR. MARK HEATH: But I wouldn't try putting, I mean, a regular peripheral IV in the arm or leg; I really wouldn't for 60 minutes. I would change over to, you know, depending on the situation, to probably putting in a central line.

DAVID M. BARRON: Why would you change over?

DR. MARK HEATH: Why? You know, after a certain number of attempts, and I can't give you an exact number, but it becomes, um, you know, the chance of one getting it in, it becomes, you know, exponentially lower. Generally, you go for the good veins that you, if can see. If you blow those, then you kind of – you don't have a lot of material to work with and you're very unlikely to get it in, so you need to change strategies.

DAVID M. BARRON: You mentioned a central line. Could you tell us what that is?

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DR. MARK HEATH: Uh, we talked about peripheral IV access or peripheral intravenous access and central intravenous access. It's with respect to the heart, which is the center of where all blood goes to and comes from. So a central IV access is one where the catheter goes into one of the large veins that's closer to the heart, like the internal jugular vein in the neck, or the subclavian vein which is under the collarbone, or the femoral

vein which is, uh, in the groin. And that's contrasted with a peripheral IV which is in a more peripheral site to the heart, i.e., the hands or the arms or the feet or the legs.

DAVID M. BARRON: Would an EMT with no additional training know how to insert a central line?

JEFF MIDDENDORF: I object to relevancy. What's this about a central line? That's – (inaudible/mixed voices)

DAVID A. SMITH: That's not even a part of the protocol.

DAVID M. BARRON: Your Honor, he mentioned what he would do if after 60 minutes had elapsed.

JUDGE ROGER CRITTENDEN: Okay.

DAVID M. BARRON: And I'm just trying to inquire, based on what he said he'd do, how that would be done, what would go about, because the protocol doesn't really state other than asking somebody to reschedule it what to do in that circumstance.

JUDGE ROGER CRITTENDEN: Okay, all right.

JEFF MIDDENDORF: And he mentioned that in, in a, in a medical setting.

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JUDGE ROGER CRITTENDEN: I understand. I think I'm going to let him continue to, well, like one more answer and then let's move on from this. He can answer as to whether anyone besides the doctor would be able to do this.

DAVID M. BARRON: Dr. Heath, would anyone other than a doctor know how to insert a central line?

DR. MARK HEATH: Yes, there are some medical professionals who are not physicians who could also insert a central line. They'd to have had, you know, all the extensive training and elbow-to-elbow supervision before they could do it on their own. A physician's assistant, uh, properly trained can do it. A nurse anesthetist properly trained can to do it. There are a number of different non-physician, uh, medical professionals who, if properly trained, would be able to do it.

DAVID M. BARRON: Do you have an opinion to a reasonable degree of medical certainty as to whether 60 minutes of sticking someone with a needle in an attempt to insert a needle would –

insert an IV, I'm sorry, would be painful?
DAVID A. SMITH: Objection, Judge. He's testified he would
try up to an hour before going to a central line. He's already
asked him that.
JUDGE ROGER CRITTENDEN: I don't know that he'd testified
that he would try up to an hour. He can, he can testify as
to whether it'd be painful or not. Go ahead. I'd say being
stuck once is painful, but go ahead.

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DR. MARK HEATH: I might have misspoken, um, because I think
what he said – that what I said is –
JUDGE ROGER CRITTENDEN: I think he said – you indicated
you would not try for an hour.
DR. MARK HEATH: I would not try for an hour, that's
correct. That's what I was trying to indicate. I can't put an
exact time, but somewhere, you know, 20 minutes or half an hour
or whatever, you pretty much reach the end of the line of what
you're going to try. Uh, and I'm sorry, could you repeat the
question that we're trying to get to now?
DAVID M. BARRON: Do you have an

opinion to a reasonable
12 degree of medical certainty as to whether spending 60 minutes of
13 sticking somebody with a needle trying and insert that IV would
14 be painful?
15 DR. MARK HEATH: It would painful, yes.
16 DAVID M. BARRON: To a reasonable degree of medical
17 certainty, do you have an opinion as to whether Kentucky's lethal
18 injection procedures pose a risk of unnecessary pain and
19 suffering to the inmate?
20 DR. MARK HEATH: I do have an opinion, yes.
21 DAVID M. BARRON: What is that opinion?
22 DR. MARK HEATH: My opinion is that there is, uh,
23 unreasonable, because it's unnecessary, uh, additional risks
24 presented by the design of the Kentucky lethal injection
25 protocol.

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Dr. Heath
1 DAVID M. BARRON: May I have a moment, please? No further
2 questions at this time.
3 JUDGE ROGER CRITTENDEN: We'll take about a 15-minute recess
4 and then we'll come back for cross-

examination. Thank you.
(Break)
JEFF MIDDENDORF: Good afternoon, Dr. Heath.
DR. MARK HEATH: Good afternoon.
JEFF MIDDENDORF: I noticed that your, your CV was dated October 6th, 2003 and that was provided to us by the Defendants. Have you written any other articles since October 6, 2003 that needs to become a part of that?
DR. MARK HEATH: No articles, no, there are some lectures and stuff that I've given that are not on there.
JEFF MIDDENDORF: Okay.
DR. MARK HEATH: They're not on there, that I've given since that date.
JEFF MIDDENDORF: So you haven't written anything since October 2003, would that be fair to say?
DR. MARK HEATH: I've written – I've also written abstracts and stuff but not – no formal articles.
JEFF MIDDENDORF: Just to, to talk about a couple of things that you mentioned, you mentioned Propofol, is that correct?
DR. MARK HEATH: Yes.
JEFF MIDDENDORF: And I apologize, I'll probably have some trouble with some of these words. Isn't it

true that sodium
26 thiopental is often used as a substitute because Propofol can be,

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1 can be, um, can cause problems to people who are – have allergies
2 to eggs and soy products?
3 DR. MARK HEATH: I, I agree with most of what you say,
4 except the word "often." It's so rare that people actually have
5 allergies to egg products that I can't think of a time that it's
6 occurred to me where – occurred to one of my patients that I
7 couldn't give them Propofol. So –
8 JEFF MIDDENDORF: But sodium thiopental is still a very
9 usable drug?
10 DR. MARK HEATH: It's a very usable drug, yes. It just – it
11 so happens that it's very rarely used now.
12 JEFF MIDDENDORF: Okay, what is pharmacokinetics?
13 DR. MARK HEATH: Pharmacokinetics is the – it's a, a
14 discipline, a biomedical discipline that studies the – what
15 happens to drugs when they're administered or given to a human
16 or an animal.
17 JEFF MIDDENDORF: Okay, so it has to do

with the effects of
18 that drug on that person, is that a fair statement?
19 DR. MARK HEATH: It has really more to do with, um, uh,
20 where the drugs go, how they get distributed within the body, um,
21 where they wind up, how they're eliminated or metabolized, um,
22 those sorts of things. But intrinsic to it and the reason why
23 people study pharmacokinetics is to understand better how drugs
24 work and how to use them properly.
25 JEFF MIDDENDORF: Okay, and what kind of clinical experience
26 do you have in that field?

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1 DR. MARK HEATH: Pharmacokinetics is not a clinical field,
2 but it's an element of, uh, basic medical training that all
3 doctors have some exposure to and that anesthesiologists have a
4 lot of exposure to that in order to –
5 JEFF MIDDENDORF: But you don't have any expertise in that
6 "discipline," if we can call it that?
7 DR. MARK HEATH: It depends how you define "expertise" and
8 "discipline." Um, all anesthesiologists, as I say, have to be.

um, trained and, and educated about pharmacokinetics in a way that most physicians don't, because we use drugs which have, um, relatively rapid time courses compared to the drugs that, uh, are prescribed on an allocation basis, these very fast-acting, very powerful drugs, and we need to understand the time courses of those drugs in the body. And so that is pharmacokinetic training. We spend time, you know, modeling how anesthetic gases go in and out of the body and –

JEFF MIDDENDORF: So you learned it in general terms.

DR. MARK HEATH: Pardon me?

JEFF MIDDENDORF: I mean as a physician, you learned it in general terms as a physician.

DR. MARK HEATH: No, we learn – all anesthesiologists learn in pretty specific terms, especially about the drugs that we use, quite specifically, otherwise it wouldn't be safe for us to use them.

JEFF MIDDENDORF: Okay, have you heard of Dr. Mark Dershwitz?

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DR. MARK HEATH: Yes, I have.
JEFF MIDDENDORF: Would you agree that he has far more
experience than you in that field?
DR. MARK HEATH: Yes, he has more experience in
pharmacokinetics than I do, yes. That's his area of – part of
his area of research.
JEFF MIDDENDORF: And in fact, in Virginia, you even
testified that he was the authority and you would defer to
anything he would say in that area.
DR. MARK HEATH: If that's what I said, I misspoke, because
I would not defer to, in blanket terms, to anything anybody
would say. Um, but, in general, um, if I had the opportunity to
discuss something, I would expect that I'd probably be – in terms
of the distribution of drugs in living people or animals, I
would, um, probably agree with what he said, (inaudible) would
have a lot of points of disagreement.
JEFF MIDDENDORF: Uh, let's talk about some of the things
that you mentioned. You said the, the BIS monitor.

DR. MARK HEATH: Um-hm [yes].
JEFF MIDDENDORF: Can you tell me what that is again?
DR. MARK HEATH: It's a, a device that uses – monitors the electrical activity of the brain through the skin, uh, and performs computations on the waveforms to provide an indication of depth of anesthesia, or level of consciousness, level of sedation.

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JEFF MIDDENDORF: And I think what you told me is that somebody could receive one hour of training on that and then practical experience with an anesthesiologist, that would sufficient.
DR. MARK HEATH: If you had appropriate underlying background. So I was stating or giving that answer to Mr. Barron in the context of, uh, if you were to train anesthesiologists on how to use this device. So in other words, people who fully understand about the medications that are used to generate anesthesia, understand about different levels of consciousness.

understand about electric – EEGs and all of those things. I was predicating that answer on a, a certain level of understanding about these things. Then, yeah, I think you'd sit down to with a person or a group of people for an hour, go over how to turn the device on and the pitfalls and stuff like that, and then deploy it on some patients and observe a number of anesthetics, watch the, the index go down and then back up as the patient goes to sleep and wakes back up.

JEFF MIDDENDORF: Okay, and a few other things that you pointed out during your testimony. You said that all three of the drugs that are used in Kentucky are often used during the same time during a surgery in a therapeutic setting. Is that correct?

DR. MARK HEATH: Yeah, I don't think I'll gave a very good answer there. All three of those chemicals would be used, or

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drugs very similar to them I should say because, just like I say, we don't use pentothal very often at all now.

JEFF MIDDENDORF: I understand that. But what you did testify to is that those three drugs can be used in combination during one surgery. Correct?

DR. MARK HEATH: That's correct, not at the same time. I would not give pentothal and pancuronium at the same time.

JEFF MIDDENDORF: I understand that, but during (Inaudible/mixed voices)

DR. MARK HEATH: (Inaudible)

THEODORE S. SHOUSE: Your Honor, I'm going to object. The witness is allowed to explain his answer.

JUDGE ROGER CRITTENDEN: Well, let's let him explain his answer. Go ahead.

DR. MARK HEATH: Just to clarify. I think we are both agreeing that I want to make sure in terms – in combination, I would not give them together at the same time. But I would, uh, give them during the same case, at different times from each other during the same case.

JEFF MIDDENDORF: Does it make a difference if it's five seconds or five minutes?

DR. MARK HEATH: For pentothal and pancuronium, it would make an enormous difference, yes.

JEFF MIDDENDORF: And if there were a saline flush in between, it wouldn't make a difference.

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DR. MARK HEATH: If they were an adequate amount of saline flush, yes. So I could give them – I could give pentothal, and then the saline flush, and then pancuronium. That is something that I could do during surgery. Yes.

JEFF MIDDENDORF: And you wouldn't have a problem. And you're, and you understand that Kentucky's protocol does use a saline flush.

DR. MARK HEATH: Yeah, it's unclear how much it uses. I can't believe that it uses what is stated there. That has to be an error.

JEFF MIDDENDORF: And I understand that. And I'll show you one of our syringes and a little bit that I show you is labeled 'cc's' –

DR. MARK HEATH: Okay.

JEFF MIDDENDORF: So that was a mistake.

DR. MARK HEATH: Well, just because it's labeled 'cc's' doesn't mean how much is drawn up into it.

JEFF MIDDENDORF: I understand. Um, now the EK – I think you testified that an EKG machine should be right next to the person. Is that correct?

DR. MARK HEATH: Um, what I tried to say if I testified to that is that the person who is monitoring the patient for anesthetic depth should be right next to the patient if possible.

JEFF MIDDENDORF: So the reading itself isn't going to make a difference.

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THEODORE S. SHOUSE: Objection. Could the witness please be allowed to explain his answer in full.

JUDGE ROGER CRITTENDEN: Well –

JEFF MIDDENDORF: I think he answered my question.

JUDGE ROGER CRITTENDEN: Let's, let's hear what, what he's having to say, and just try not to interrupt, although let's get sort of the answers without going too far into it. Okay.

DR. MARK HEATH: The anesthesiologist should be right next to the patient, and they should have a very good view of the monitor. So it should be, you know, close,

uh, the ORs where I
work, we have three-foot-wide monitors that are across the room,
but the point is they have to be very easily visible to person
who's responsible for monitoring and assessing anesthetic depth.
JEFF MIDDENDORF: Okay, but it's not –
DR. MARK HEATH: The distance isn't what really matters.
JEFF MIDDENDORF: It's not – it's not going to effect the
readout whether the machine is 5 feet away, or 20 feet away. If
the monitor is hooked up properly to the person, you are going to
have a same reading across the machine whether the person is
sitting right next to it, or it's right next to the patient, or
20 feet away, is that a fair statement?
DR. MARK HEATH: Yeah, but a readout without a reader is not
a readout. So if the reader isn't right next to the machine
then, then, in effect there's no readout.
JEFF MIDDENDORF: Now, you testified that you're familiar
with Kentucky's drugs. Is that correct?

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DR. MARK HEATH: Do you mean the use of them in a clinical

setting or I know what the – I know what drugs are used?

JEFF MIDDENDORF: You are familiar with the drugs that they use in a lethal injection?

DR. MARK HEATH: Yes.

JEFF MIDDENDORF: And you've also been provided with the amounts of the drug Kentucky uses, is that correct?

DR. MARK HEATH: I have, yes.

JEFF MIDDENDORF: And if I've just made the, the comment, would you agree that these are large, very large amounts of each one of these drugs? Is that a fair statement?

DR. MARK HEATH: With the exception of the – in most cases, they are large amounts. There are times when we would give that much pentothal to a patient.

JEFF MIDDENDORF: Okay. And each one of these drugs are actually lethal in themselves, is that a fair statement, the amounts?

DR. MARK HEATH: Given by themselves, if successfully delivered into the circulation, each one will be lethal, yes, on their own.

JEFF MIDDENDORF: Now, I believe you also testified in

Virginia, is that correct, in the James Reid v. Gene Johnson case, is that a fair statement?

DR. MARK HEATH: That's right.

JEFF MIDDENDORF: Now, Virginia uses two grams of sodium thiopental, is that correct?

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DR. MARK HEATH: I'm, I'm not sure what they use.

JEFF MIDDENDORF: When did you testify in that?

DR. MARK HEATH: In September.

JEFF MIDDENDORF: Of this past year?

DR. MARK HEATH: Of 2004, yes.

JEFF MIDDENDORF: And you don't recall what amount they use?

DR. MARK HEATH: I've looked at protocols from 30-odd states and I'm, I'm wary of stating it affirmatively what an amount is, because it's quite possible I'll confuse it with somewhere else.

JEFF MIDDENDORF: Okay. And you testified under oath in that case?

DR. MARK HEATH: Yes.

JEFF MIDDENDORF: And what was your opinion as to whether two grams were properly administered to the individual, what kind of death would that person experience?

DR. MARK HEATH: If two grams is properly administered?
JEFF MIDDENDORF: Yes.
DR. MARK HEATH: In virtually every case, then that would be a humane death.
JEFF MIDDENDORF: Is it true that a usual dose to induce general anesthesia is generally four to seven milligrams per kilogram?
DR. MARK HEATH: I'd say it's probably a little bit less than that.
JEFF MIDDENDORF: Okay, so what, what is your opinion?

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DR. MARK HEATH: You know, you probably weigh about 70 or 80 kilograms, and you'd probably get, uh, depending on the time of day and a variety of things, you know, a couple hundred milligrams. And that would be –
JEFF MIDDENDORF: I don't know if that was a compliment or an insult, because I can't convert that in my head right now.
DR. MARK HEATH: Uh, I would give – you said, you said four to seven?
JEFF MIDDENDORF: Four to seven,

DR. MARK HEATH: That's a little heavy.
JEFF MIDDENDORF: That's heavy?
DR. MARK HEATH: Yeah.
JEFF MIDDENDORF: Just to be safe, let's talk about maybe six milligrams per kilogram. Would you –
DR. MARK HEATH: Okay. Heavy, but, but for some people, I would give them that much.
JEFF MIDDENDORF: Okay. Um, if you were to give a six milligrams per kilogram dose, would you agree that roughly 50 percent of the population would wake up in seven to eight minutes? Does that sound like a fair statement?
DR. MARK HEATH: From that heavy dose, yeah, I'd expect them take – like I say, I wouldn't generally use a dose that high, and so, um, uh, it probably would take about that long. That sounds ballpark right. And, again, there's a lot of variability between individuals, just like there is on alcohol sensitivity.

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JEFF MIDDENDORF: Okay, and I think during your direct examination you were referred to Plaintiffs' Exhibit 3, is that

correct? Do you –
DR. MARK HEATH: I need to see it a little closer.
JUDGE ROGER CRITTENDEN: I think that was the time –
(Inaudible/mixed voices)
DR. MARK HEATH: The timing of the drugs. Yes, I saw that.
JUDGE ROGER CRITTENDEN: (Inaudible). Yes.
JEFF MIDDENDORF: And you also looked at the EKG readout, is
that correct?
DR. MARK HEATH: Yes.
JEFF MIDDENDORF: Now, you testified that it appears that
the first drug started being pushed at 7:16, is that correct?
DR. MARK HEATH: I better not cite my testimony without
having the numbers in front of me.
JEFF MIDDENDORF: Okay.
DR. MARK HEATH: If you're saying that's what I said, then,
uh, and they're not objecting, then it's probably accurate, but I
don't know that for sure.
JEFF MIDDENDORF: When you look at the EKG, you testified
that he died at 7:21. So 7:16 to 7:21, how long is that?
DR. MARK HEATH: Five minutes.
JEFF MIDDENDORF: So what you just said, a regular

24 therapeutic dose of sodium thiopental would possibly keep that
25 person asleep or unconscious for really what it took to, to
26 execute Eddie Lee Harper.

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1 DR. MARK HEATH: Yeah, that's right, in the ballpark. They
2 might be woken up by then, they might not, depending on their
3 individual sensitivity to thiopental.
4 JEFF MIDDENDORF: And we use 3,000 milligrams, correct?
5 DR. MARK HEATH: That's the dosage intended to be delivered
6 into the circulation, correct. And that's the protocol provides
7 (inaudible) as I last saw it, okay.
8 JEFF MIDDENDORF: Would you also agree that if prop- –
9 properly delivered, the individual would become unconscious
10 within – certainly within 60 seconds?
11 DR. MARK HEATH: Yeah, we talked about, um, the slang term,
12 we talked about "vein-to-brain" time, so the drug, when it goes
13 in the vein had to be carried by the circulation to the brain
14 before it can have – start having an effect. Sixty seconds is a
15 good ballpark for how long that might take.

JEFF MIDDENDORF: Have you ever given a three-gram dose of sodium thiopental for purposes of inducing a barbiturate coma?

DR. MARK HEATH: Yes, I have. I'm not sure if it was three grams or more or less, but in that realm.

JEFF MIDDENDORF: And it might be to fix an aneurism or something?

DR. MARK HEATH: Exactly that kind of surgery, right.

JEFF MIDDENDORF: What measures do you have to take to support the patient's circulation with a three-gram dose of sodium thiopental?

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DR. MARK HEATH: They're basically responsive measures, for the most part. One observes the effects of the drug as it goes in on – mostly the big concern is the blood pressure, and, uh, and treats appropriately. Depends on the – when one – where one is in the surgery and exactly how it's being done.

JEFF MIDDENDORF: So you would have to take significant measures to keep that person alive given a three-gram dose of

sodium thiopental, in that kind of surgical setting?
DR. MARK HEATH: Well, we're always taking matters to keep
the patient alive under anesthesia. We're ventilating them and
maintaining – going things to maintain blood pressure all the
time. So it'll be a continuation of those things.
JEFF MIDDENDORF: Okay, let's assume that you didn't take
any other measures and gave a three-gram dose of sodium
thiopental. What would you expect to happen?
DR. MARK HEATH: I'd expect the blood pressure to drop.
JEFF MIDDENDORF: Would that kill them?
DR. MARK HEATH: No, I wouldn't expect it to cause death.
JEFF MIDDENDORF: How long would you expect them to be
unconscious, with no other measures?
DR. MARK HEATH: Many hours. It depends on how exactly how
their body processes the thiopental, but certainly many hours
after three grams.
JEFF MIDDENDORF: Many hours?
DR. MARK HEATH: Yeah.

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JEFF MIDDENDORF: Now let's talk a little bit about infiltration. Is that when the needle would go through and it wouldn't necessarily go directly into the vein?

DR. MARK HEATH: Right.

JEFF MIDDENDORF: Is that, as I said, a layman's term –?

DR. MARK HEATH: Different configuration. It could go through or not far enough, or it could be in the right place and the vein gets (inaudible) or ruptured so the solution backs out of the vein.

JEFF MIDDENDORF: Okay. And I know you were asked about local swelling. You know roughly the amount of chemicals or drugs that we use in an execution here in Kentucky.

DR. MARK HEATH: I don't know the concentrations that's been using at – used.

JEFF MIDDENDORF: I understand the concentration, but volume.

DR. MARK HEATH: Well if you don't – if I know the quantity, but I don't know the concentration, so

therefore I can't know the
19 volume.
20 JEFF MIDDENDORF: Okay. But you know it's, it's, it's a
21 significant amount.
22 DR. MARK HEATH: I really don't know what concentration they
23 are making it up in.
24 JEFF MIDDENDORF: Would you agree that if you pushed a great
25 deal of fluid into somebody's vein, that you would notice
26 swelling around that site?

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1 DR. MARK HEATH: Uh, what, what do you mean by a "great
2 deal"?
3 JEFF MIDDENDORF: Enough to be noticeable by an ordinary
4 person.
5 DR. MARK HEATH: (Inaudible) tautology.
6 JUDGE ROGER CRITTENDEN: Well, I mean, (inaudible) "great
7 deal," how much fluid I think was the question. Twenty-five
8 milliliters, or whatever it is.
9 DR. MARK HEATH: I've, I've never added up the, the complete
10 amount.
11 JUDGE ROGER CRITTENDEN: All right.
12 (Inaudible/mixed and muffled voices)
13 JEFF MIDDENDORF: I'll just move on

(inaudible).
JUDGE ROGER CRITTENDEN: All right.
JEFF MIDDENDORF: Are you aware – would you disagree what Dr. Tracey Corey, the State's Medical Examiner, that she noticed no infiltration? Do you have any reason to disagree with that?
DR. MARK HEATH: I, I don't know the credentials and all that stuff, but if she's the State's Medical Examiner, I'm sure she's, you know, extremely well-qualified. And if she did not see any evidence of infiltration, I think it's unlikely that there was an infiltration.
JEFF MIDDENDORF: And, and speaking about the Harper execution, I think you briefly touched on that during your testimony. Um, are you aware that everyone in that, or everybody who witnessed that execution said that Eddie Lee Harper went to

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sleep immediately, and made no movement for the rest of the execution? Have you read that when you looked into Eddie Lee Harper's execution?
DR. MARK HEATH: Not aware that

everybody said that, but I
did see descriptions that said it was – it appeared to be peace
peaceful and, and no struggling, etc.
JEFF MIDDENDORF: And if somebody were given a three-gram –
or back then a two-gram dose of sodium thiopental, is that
exactly what you would expect to see?
DR. MARK HEATH: Uh, yeah, I'd expect to see a cough or a
hiccup or some puffing of the lips for a few seconds, and then
for the person to be still.
JEFF MIDDENDORF: Are you familiar with Professor Deborah
Denno?
DR. MARK HEATH: I know her, yes. I know some of her work.
It's pronounced Denno.
JEFF MIDDENDORF: Did you have any discussions with her
regarding the Eddie Lee Harper execution?
DR. MARK HEATH: I've had quite a few discussions about
lethal injection with Professor Denno, and I do not recall any
discussions about the Harper execution.
JEFF MIDDENDORF: Do you know if she considered that a
proper execution?
THEODORE S. SHOUSE: Objection, hearsay.
JEFF MIDDENDORF: I don't believe there

is any –
26 THEODORE S. SHOUSE: I object to the form of question.

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1 JUDGE ROGER CRITTENDEN: I'll, I'll sustain. You don't have
2 to answer that question.
3 JEFF MIDDENDORF: Now you mentioned, I believe, the
4 execution of Timothy McVeigh, and in the context of that, you
5 mentioned that a possible tear in the eyes is classic sign of
6 being light under anesthesia. Do you recall that testimony?
7 DR. MARK HEATH: Yes.
8 JEFF MIDDENDORF: Who is that witness that you were talking
9 about that noticed the tear in Timothy McVeigh's eye?
10 DR. MARK HEATH: It was a reporter from a newspaper in
11 upstate New York. I don't recall his name or the, or the, uh,
12 newspaper.
13 JEFF MIDDENDORF: Was it just one witness or did you real
14 multiple accounts?
15 DR. MARK HEATH: I just read that – that's the only one that
16 I recall, that one witness. I think he was a witness who was in

the – at the, at the site, as opposed to the witnesses who were looking at a video camera which was looking straight down at the face. I believe he was looking from the side.

JEFF MIDDENDORF: How do you know that?

DR. MARK HEATH: Because I think he was there. Like I said, I don't know for a fact, but I believe –

JEFF MIDDENDORF: You can't verify that, that is a guess.

DR. MARK HEATH: All, all the configurations I've seen, the witness are – (inaudible) close to the same level as the inmate, and the inmate's is on their back. So, um, inferring from what I

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know about all the other executions, I believe she was looking from the side, but I'm not certain about that.

JEFF MIDDENDORF: Isn't it true that other things could cause a tear in the eye when they're, when somebody's unconscious?

DR. MARK HEATH: It is. But I'll tell you, when somebody is under anesthesia and we see tearing in the eye, we are very

concerned that they're light under anesthesia.

JEFF MIDDENDORF: But it doesn't necessarily mean that they're feeling the effects of a, a drug like Pavulon?

DR. MARK HEATH: It doesn't prove it, No. The only way to know that somebody is conscious, when they are paralyzed, is to ask them once they're not paralyzed. It is the only way to know for certain.

JEFF MIDDENDORF: Are you familiar with an article by Dr. {Pomfritz}, "Monitoring Depth of Anesthesia"?

DR. MARK HEATH: No, I'm not.

JEFF MIDDENDORF: Judge, if we could mark this, I believe it is Exhibit 4.

JUDGE ROGER CRITTENDEN: Are we on four or three?

MALE VOICE: Four.

DAVID M. BARRON: Your Honor, we're going to object to this document.

JUDGE ROGER CRITTENDEN: Is it something that's been provided?

DAVID M. BARRON: We haven't seen this before.

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JEFF MIDDENDORF: Judge, this isn't our witness.
JUDGE ROGER CRITTENDEN: You can ask him about it. Go ahead. You haven't admitted it yet.
SUSAN J. BALLIET: Can we get a copy of it?
(Inaudible/mixed and muffled voices)
JEFF MIDDENDORF: Now Doctor, can you read the second paragraph, the highlighted portion, or the underlined portion?
DR. MARK HEATH: The second area that's highlighted or the second – first paragraph that's highlighted.
JEFF MIDDENDORF: Just the underlined part.
DR. MARK HEATH: There's two underlined parts on my page.
JEFF MIDDENDORF: On the left side, if you're facing it.
DR. MARK HEATH: Yes. "Awareness during surgery happens" – and then in parentheses – "(Awareness during anesthesia is an oxymoron.)" Close parentheses. "Failure to deliver inadequate levels of anesthesia is the cause of awareness. Equipment failure is an obvious cause of the inadequate anesthesia, but

poor judgment regarding the amount of anesthetic required to counteract the stimulating effect of not just surgical procedures is probably the most common cause."

JEFF MIDDENDORF: So these are doctors that make mistakes. It's not the drugs. We continue to blame the drugs, but it's actually the doctors are the ones that might cause this phenomenon, is that a fair statement?

DR. MARK HEATH: Not completely. There are instances where a patient is extremely resistant to anesthetic drugs, um, and,

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uh, uh, giving a normal or even a high dose produces variable anesthetic effects. But in general, I would agree that it is the responsibility of the anesthesiologist to monitor and – all the signs and the equipment and be constantly synthesizing that information to come up with their judgment about whether the patient is properly anesthetized. And I would agree with what I think you're asking, that it's – that errors in judgment that, uh, are causing – the major cause of

patients being awake and
9 paralyzed during surgery.
10 JEFF MIDDENDORF: And what this article talks about is a
11 therapeutic setting, correct, not an execution?
12 DR. MARK HEATH: I haven't read it, but I can't, uh, –
13 JEFF MIDDENDORF: Well, that –
14 DR. MARK HEATH: – I'd be surprised if it's not about a
15 therapeutic setting. Clearly it's about a therapeutic setting.
16 JEFF MIDDENDORF: Now, if you can read the second underlined
17 paragraph on the right side, if you can read that as well.
18 DR. MARK HEATH: Yes. It says: "Given that awareness does
19 occur, how can it be prevented? Vigilance is the best advice.
20 Unexplained changes in subjective estimates of light anesthesia,
21 EG, mean pulse rate, blood pressure, tears and sweating, may
22 be signs of awareness in patient subjects to competitive
23 neuromuscular blockade. However, these signs are not reliable,
24 and it has been shown that the anesthetic records of patients
25 who have exhibited awareness cannot be distinguished from normal
26 patients when scrutinized by blinded

anesthetists.

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JEFF MIDDENDORF: We would ask that be admitted, Your Honor.
JUDGE ROGER CRITTENDEN: Any objection to admission?
DAVID M. BARRON: Just that – the one we stated previously,
that it wasn't disclosed in discovery.
JEFF MIDDENDORF: Oh, Judge, this is their witness.
JUDGE ROGER CRITTENDEN: I'll order it admitted, #4.
JEFF MIDDENDORF: If I could have just one minute, Your
Honor. Okay, let's talk about the mixing of sodium thiopental; I
believe you had, uh, touched on that during your testimony. I
believe you testified that sodium thiopental is unstable, so you
actually mix it yourself. Is that a fair statement? Was that
your testimony?
DR. MARK HEATH: I don't think that I explained why it is
that we mix it ourselves. I just stated it as a point of fact
that it comes unmixed and that we have to mix it.
JEFF MIDDENDORF: Well, let, let me ask about – did you –

didn't you testify that you mix it yourself?
DR. MARK HEATH: Yes. On the rare occasions when I use now,
yes.
JEFF MIDDENDORF: And I believe you testified that you do
this because it begins to deteriorate immediately. Is that
correct?
DR. MARK HEATH: I actually don't recall testifying to that
today.
JEFF MIDDENDORF: Okay, do you recall testifying to that in
another state?

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DR. MARK HEATH: No, I don't. I'll state as a point of
fact, I agree with it and it's true. (Inaudible/mixed voices)
JEFF MIDDENDORF: Okay, that it begins to deteriorate
immediately.
DR. MARK HEATH: It, it does begin to deteriorate. It's not
stable in solution compared to many other drugs that can be kept
in liquid mixed solution for months at a time.
JEFF MIDDENDORF: How fast would you say it begins to
deteriorate?

DR. MARK HEATH: (Inaudible) the process starts right away. It depends on what you mean by "fast." It shouldn't be used more than 24 hours after being mixed up.

JEFF MIDDENDORF: Uh, is it true that some hospitals mix it in liter gallon, or in, in liter bottles that use quite a bit of it, and they would put a 72-hour expiration date on that?

DR. MARK HEATH: I don't know if that is true or not. I've never – I've never heard of that practice.

JEFF MIDDENDORF: So it would last for a long time–

DR. MARK HEATH: I, I, I would say also I don't believe that there are that many hospitals even using pentothal in liter quantities per day. I think it's –

JEFF MIDDENDORF: Let me ask you this: Kentucky, Kentucky's protocol says to mix up at least two hours prior to an execution. Is there any chance of it not being effective by the time it is inserted into the inmate's vein?

DR. MARK HEATH: If you're asking –

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(Inaudible/mixed voices)

JEFF MIDDENDORF: Done properly, I

understand that. If done properly.

DR. MARK HEATH: Right, and if everything done properly, deterioration is not going to be a significant problem over two hours.

JEFF MIDDENDORF: In fact, there's not going to be any, is it?

DR. MARK HEATH: I can't say nothing, because there might be a one in a one – 1/1000th drop in potency or something like that.

JEFF MIDDENDORF: I believe you also testified that sodium thiopental would precipitate with pancuronium bromide, is that correct?

DR. MARK HEATH: If that's what I said, I guess I wasn't speaking quite clearly. The pancuronium, the solution that the pancuronium is in causes the pentothal to precipitate on a solution.

JEFF MIDDENDORF: Which one would precipitate?

DR. MARK HEATH: The pentothal.

JEFF MIDDENDORF: But it would precipitate on an equal ratio, is that correct, or equal amounts?

DR. MARK HEATH: It, it's interesting, and my unders- – I

think many people think that the pancuronium molecules and the pentothal molecules actually bind together, you know, one-to-one, and come out of solution, but I don't think that's what happens. I think what happens is the pentothal sticks to itself when it

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comes out of solution. The, the solu- – the pancuronium then does not support pentothal staying dissolved.

JEFF MIDDENDORF: Do you have anything to back that up, that theory?

DR. MARK HEATH: I have read it in medical literature.

JEFF MIDDENDORF: Okay.

DR. MARK HEATH: I don't have that with me. I can't give you a citation right now.

JEFF MIDDENDORF: If Dr Dershwitz were to testify that if we use 3,000 milligrams of sodium thiopental and 50 milligrams of pancuronium bromide, if they were to actually come in contact with each other, only 50 milligrams of sodium thiopental would actually precipitate, would you disagree with that? So he would

be of the opinion that 2950 milligrams would remain of sodium thiopental.

DR. MARK HEATH: If that's what he's saying, I think he's completely confusing milligrams and molar amounts. These molecules have very different molecular weights, and they also don't precipitate one-to-one, is my understanding, with each other. So I would disagree with what I think you're saying Dr. Dershwitz would say.

JEFF MIDDENDORF: You say "your understanding." What is, what is that?

DR. MARK HEATH: My understanding is that the –

JEFF MIDDENDORF: What is it based on?

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DR. MARK HEATH: It's based on having read about the interaction between pancuronium solutions and pentothal solutions.

(Inaudible/mixed and muffled voices)

JEFF MIDDENDORF: May I approach, Judge, please?

JUDGE ROGER CRITTENDEN: Go ahead.

JEFF MIDDENDORF: Are you ready for – to read what that

says?
DR. MARK HEATH: Yes, I am.
JEFF MIDDENDORF: Okay, and it says "cc's" as you testified earlier, of saline?
DR. MARK HEATH: Uh, yes.
JUDGE ROGER CRITTENDEN: Would you let Mr. Barron see that for just a second?
JEFF MIDDENDORF: Sure, I apologize.
DAVID M. BARRON: (Inaudible)
JUDGE ROGER CRITTENDEN: He just asked – he asked him if that says "cc's" and he answered "yes."
JEFF MIDDENDORF: That's all I asked.
DAVID M. BARRON: Well, I am going to object to the relevancy of any questioning involving this, whatever he happens to be at the moment on the basis that we have no idea if this is something he picked up on the street, or something that is used in lethal injections here, or anything.
JUDGE ROGER CRITTENDEN: I, I assume that when they present their case, it may come forward. It may not.

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JEFF MIDDENDORF: Would you agree that a, a phlebotomist is certainly capable of inserting an IV into a vein?

DR. MARK HEATH: No, not necessarily, not certainly.
JEFF MIDDENDORF: What about somebody with eight years ex- – of experience that does it on a daily basis?
DR. MARK HEATH: Probably they would be, yes.
JEFF MIDDENDORF: Okay. And an EMT certainly, if they had enough experience could do that?
DR. MARK HEATH: If they had enough experience, then by definitely they would be able to do it. Again –
JEFF MIDDENDORF: And in fact –
JUDGE ROGER CRITTENDEN: Let him finish. Go ahead.
DR. MARK HEATH: If anybody, you know, if it's doable, and like I said, some people, it's very, very difficult to attain, put an IV in. So, just, just to clarify, I wouldn't say that they can certainly do it, because there's some people that certainly nobody can do it to.
JEFF MIDDENDORF: In fact, I think you testified that inserting IVs is basically easy. That was your testimony?
DR. MARK HEATH: For people for whom it's easy, it is easy. yes.
JEFF MIDDENDORF: And you also

testified that if you weren't
23 able to do it within a matter of a few minutes, you would ask
24 somebody else to do it?
25 DR. MARK HEATH: Yeah, it would depend upon how the patient
26 is tolerating it and stuff, because –

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1 JEFF MIDDENDORF: Are you aware that there are two members
2 of the IV Team in Kentucky?
3 DR. MARK HEATH: Yeah.
4 JEFF MIDDENDORF: So if one weren't able to get an IV into
5 one vein, one person could do both of them?
6 DR. MARK HEATH: Possibly, yes.
7 JEFF MIDDENDORF: And, and I thought you testified that
8 you would try it up to an hour. Maybe not you personally, but
9 somebody at the hospital, maybe a couple of people, might try it
10 up to an hour before you would start a central line.
11 DR. MARK HEATH: If I said that, that was not what I meant
12 to say. That would be excessive generally. And, again, it
13 really depends on the situation and the patient. But after a few
14 tens of minutes, uh, you've basically exhausted all the potential

sites, and you're not – there's nothing more to try for, and it just becomes, uh, you know, fruitless. And so one would change tactics. And if the patient really had to have IV access, which basically all of our surgical patients do, we would go straight to a central line. But I would not go for – it's hard to imagine a situation where I'd go for an hour.

JEFF MIDDENDORF: Is it true that most hospitals actually have IV technicians or phlebotomist technicians?

DR. MARK HEATH: I don't know the statistics on the percent of hospitals that –

JEFF MIDDENDORF: What about your hospital? Do you have technicians other than nurses and doctors that insert IVs?

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DR. MARK HEATH: There are some that work on the floors, yes.

JEFF MIDDENDORF: Okay. Um, is it also true that often they teach medical residents, because they are so proficient in it, because they do it?

DR. MARK HEATH: That's definitely true.

yes.
JEFF MIDDENDORF: Now you've testified, I believe you stated, in many other states, is that correct? Or at least –
DR. MARK HEATH: Testified in court in, I think, about four other states.
JEFF MIDDENDORF: Have you ever testified on behalf of the state in an execution? I realize that, uh, the people that hired you are state attorneys also, but each time have you testified on behalf of inmates?
DR. MARK HEATH: Yes.
JEFF MIDDENDORF: If it's okay, can I refer to pancuronium bromide as Pavulon? It might make it a little bit easier?
DR. MARK HEATH: Fine with me.
JEFF MIDDENDORF: The higher a concentration of Pavulon, the quicker they would go to sleep. Is that an accurate statement?
DR. MARK HEATH: No.
JEFF MIDDENDORF: Or quicker they would be paralyzed. Do you disagree with that statement?
DR. MARK HEATH: Yes, I do. The concentration –
JEFF MIDDENDORF: Well, the higher the milligrams –

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DR. MARK HEATH: It's – the more milligrams that are given, you're saying the faster the onset?
JEFF MIDDENDORF: Yes.
DR. MARK HEATH: That's what you're asking about? You're asking about the actual speed of onset of paralysis.
JEFF MIDDENDORF: The more that I give in milligrams. If I give 50 milligrams like I do in Kentucky, that individual is going to become paralyzed quicker than if I gave him two milligrams.
DR. MARK HEATH: Correct. With two milligrams, they wouldn't be completely paralyzed, but yes, that's correct.
JEFF MIDDENDORF: And I believe you testified that they would desperately want to breathe, because they would be suffocating if given 50 milligrams. Is that an accurate statement?
DR. MARK HEATH: If somebody were not given an anesthetic drug, and so if they were just given 50 milligrams of pancuronium? Yes.

JEFF MIDDENDORF: But Kentucky doesn't do that, do they,
from the protocol that you've read.
DR. MARK HEATH: The, the protocol is intending to give
three grams of, of pentothal.
JEFF MIDDENDORF: And you would also agree that Pavulon
remains a very useful drug in many hospitals. Is that correct?
DR. MARK HEATH: Yes.

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JEFF MIDDENDORF: I believe you testified that the, I guess,
desired effect in an execution is to render the person dead in a
humane and dignified fashion. Do you recall testifying to that?
DR. MARK HEATH: I don't think I said "dignified." I just
said dead – execution –
JEFF MIDDENDORF: Humane fashion.
DR. MARK HEATH: – dead and humane, but I'd agree with
"dignified" also.
JEFF MIDDENDORF: And Pavulon is sometimes – sometimes used
in surgeries where there might be – I believe you testified
delicate, uh, procedures that needed to be do – be done. Like
around the spine, you would certainly use

Pavulon, or something
like that.
DR. MARK HEATH: Actually not around the spine, but there
are places, the eye, the ear, abdominal, there are surgeries when
it would be very beneficial to use Pavulon.
JEFF MIDDENDORF: Now, if I used Pavulon on an individual,
is there the chance of IV lines being pulled out if there was any
kind of involuntary muscle reaction?
DR. MARK HEATH: I, well, muscle (inaudible) –
JEFF MIDDENDORF: If I weren't given that drug, is there the
possibility that there would be involuntary muscle movement?
DR. MARK HEATH: Yes. And there's a possibility of it with
pancuronium also.
JEFF MIDDENDORF: There is?
DR. MARK HEATH: I think it's possible, yes.

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JEFF MIDDENDORF: Okay. But if I am given that – but you
just testified, I believe, that you use Pavulon to make sure that
they don't move.
DR. MARK HEATH: Right, but you don't give concentrated

potassium. Concentrated potassium I think it is likely to be able to cause muscle contractions even in a person who's been given pancuronium. That seems possible. Again, we're a little bit out of the realm of what is known because it hasn't been clinically studied.

JEFF MIDDENDORF: But a line is less likely to be pulled out, or come out from an involuntary movement, if Pavulon were given to an individual, or administered to an individual?

DR. MARK HEATH: Yes, if pentothal has been given properly, there wouldn't be any involuntary movement anyway. If the Pavulon is being given to stop involuntary movement, that means there's a concern that pentothal hasn't been given properly.

JEFF MIDDENDORF: I don't believe –

DR. MARK HEATH: And it's my understanding that the inmate is restrained, so in this particular context, I am not sure what kind of involuntary movement would be capable of dislodging a properly secured IV. I think that's virtually impossible.

JEFF MIDDENDORF: I believe you talked about the mixing

of drugs. Is that correct? Or at least the reconstituting of
sodium thiopental. Do you recall talking about that?
DR. MARK HEATH: That was discussed, yes.

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JEFF MIDDENDORF: And I think you testified that it's a
difficult thing to do. Does, does that sound familiar?
DR. MARK HEATH: All these things were in the context of
what one's background is.
JEFF MIDDENDORF: Okay.
DR. MARK HEATH: I think if I asked you to do it, you would
probably botch it up. If I asked –
JEFF MIDDENDORF: I appreciate that.
DR. MARK HEATH: Yes, no, no offense. But if I asked a, a,
you know, a person who is – frequently as a part of their daily
clinical practice is proficient in the use of terms like cc's,
and milliliters, and milligrams, and grams, and percentages and
stuff like that –
JEFF MIDDENDORF: Have you seen the pictures of how they are
bought here in Kentucky, correct? That was provided to you by

the Plaintiffs?
DR. MARK HEATH: I did see xerox pictures, yes.
JEFF MIDDENDORF: Okay. And sodium thiopental basically comes in really a little tube of powder, and also a little tube of fluid. Is that correct?
DR. MARK HEATH: Not exactly. There is a glass bottle that has powder in it.
JEFF MIDDENDORF: Okay. Okay, we might disagree on the container, but it's a very small – two small containers, glass, with a, I guess a little bit of maybe kind of plastic on the top

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or rubber on the top that you would stick a needle down into, correct?
DR. MARK HEATH: Yes.
JEFF MIDDENDORF: And then you would pull up the fluid.
DR. MARK HEATH: Yes.
JEFF MIDDENDORF: Stick it in the powder, and push it in and shake it up.
DR. MARK HEATH: Yes.
JEFF MIDDENDORF: And I believe our doctor, actually testified, Dr. Hass said that it's like mixing

Kool-Aid. How
difficult is that? I just described it. How difficult is it to
pull back on a syringe with the fluid, take it out, put it into
the powder, and push the fluid back in and shake it up. Is that
difficult to do?
DR. MARK HEATH: I don't even know what percentage you're
trying to make up.
JEFF MIDDENDORF: Five hundred milligrams.
DR. MARK HEATH: That's not a percentage; that's an amount.
JEFF MIDDENDORF: Okay. What – does it make a difference?
If I were –
DR. MARK HEATH: Again, I don't know what the details of
your – of the protocol are, so I don't know how difficult it is
to follow it.
JEFF MIDDENDORF: But the actual mixing of the chemicals is
not a difficult thing to do.

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DR. MARK HEATH: If you have the right amount of powder,
and the right amount of water, yes, shaking something is not
difficult to do.

JEFF MIDDENDORF: Okay. And somebody, I think you saw that we have qualifications on our IV Team. You spoke about that briefly, correct?

DR. MARK HEATH: That was touched upon, yes.

JEFF MIDDENDORF: Okay, and –

DR. MARK HEATH: I haven't seen their credentials or anything like that.

JEFF MIDDENDORF: But you understand that we require some kind of medical background with those people?

DR. MARK HEATH: Yes. There was a list of different possibility for medical corpsmen or various things that it could be.

JEFF MIDDENDORF: And those people that are mentioned there, if they had experience, they can certainly take care of that mixing of the drugs?

DR. MARK HEATH: If you read the –

JEFF MIDDENDORF: Or reconstituting that one drug, I should say.

DR. MARK HEATH: Yes, if you read the package insert for pentothal, what it says is it should only be done by individuals who are trained and experienced – I forgot

the exact language –
25 in the administration of intravenous anesthetics. So given that
26 most phlebotomists – I think – I don't think many phlebotomists

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1 give intravenous anesthetics, and very few, uh, EMTs function
2 as anesthesiologists, the answer is no. Because the package
3 insert itself says that the only people who should use this,
4 particularly mixing it up, are people who are trained and
5 experienced in the administration of intravenous anesthetics.
6 JEFF MIDDENDORF: But would you agree that phlebotomists and
7 EMTs are familiar with cc's and volume and concentration?
8 DR. MARK HEATH: Actually phlebotomists don't administer
9 drugs, is my understanding. I don't know about Kentucky
10 specifically, but there is no reason for them to be familiar
11 with cc's and milligrams and percentages and all those things.
12 Furthermore, I am not aware of any drugs that EMTs mix up
13 themselves. And that could reflect the fact that I'm not an EMT.

but generally the drugs that EMTs use –
JEFF MIDDENDORF: Judge, I don't know if there is a question
out there.
JUDGE ROGER CRITTENDEN: Well, he's responding, yes, to EMTs
and paramedic question you asked. Go ahead. Let me, let me ask,
you're, you're talking about mixing up those two bottles, and,
and Dr. Heath has asked about concentrations. Is there an, an
amount of water, I guess, sterile water, that you use with 3
grams of sodium thiopental? I mean, is there a specified amount?
DR. MARK HEATH: There's a, a range of, of amounts, so it
could be made up, I think, as low as two percent. If you go
below two percent, then that causes problems with the blood and
they generally don't talk about going above five percent, um, at

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least to my knowledge. But generally is that anywhere within
that range, I think, would be considered normal, depending on the
kind of context.
JUDGE ROGER CRITTENDEN: Oh, so the amount – the amount of

thiopental that's in the one jar, ideally, the water that goes in would be an amount that would, that would equal a two-percent solution, or a four-percent solution?

DR. MARK HEATH: Whatever it is. I don't know what the DoC is aiming for. It doesn't specify in the protocol the concentration or the volume. It just says the amount and the number of grams.

JUDGE ROGER CRITTENDEN: Okay.

JEFF MIDDENDORF: When you're actually – let me ask you this, maybe this will clear up. When you actually buy the drug, and I think you've been provided with pictures, is that correct?

DR. MARK HEATH: I've seen, I think, those pictures, yes.

JEFF MIDDENDORF: It actually – the powder actually comes with the fluid in the amounts that they are supposed to be mixed in. So you don't have to measure – to mix at least those two together, you don't have to measure anything else.

DR. MARK HEATH: But what I don't –

JEFF MIDDENDORF: It's one-to-one.

DR. MARK HEATH: Different Departments of Corrections around the country use different concentrations of

thiopental, and I
25 don't know which one – what the Kentucky DoC has specified. So I
26 don't know if they want it to be mixed up that way or not. I

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1 mean, you can't know that without knowing the volume in which the
2 drug is to be constituted as well as the amounts of drug. It's
3 elementary (inaudible) chemistry.
4 (Inaudible/mixed and muffled voices)
5 JEFF MIDDENDORF: I just want to go back for one second.
6 Going back from the – if we look at the EK – the questions
7 regarding the EKG and also the actual time when the first drug
8 was administered, I believe the, the time period is five minutes.
9 Do you recall that?
10 DR. MARK HEATH: I think we agreed on that, yes.
11 JEFF MIDDENDORF: Okay. So if – and I believe you testified
12 because I wrote this down, but – I am sorry – if I can find the
13 spot, you didn't notice anything out of the ordinary according to
14 the EKG tape or the reading?
15 DR. MARK HEATH: Until the rhythm deteriorates.

JEFF MIDDENDORF: Until the potassium chloride comes, and within one – within one minute of the, of the potassium chloride, he's, he's basically dead, correct?

DR. MARK HEATH: Right. I was just going to say, the rhythms, there can be some ambiguities and it's possible to think that some of the stretches of that deteriorated rhythm, there might be some heart pumping. That gets into a definition of what death actually is. But, yeah, I'd say the heart is stopped and there is no more profusion of blood and (inaudible).

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JEFF MIDDENDORF: And if these times are accurate, if somebody came in here and said, now he was alive for 10 minutes, 15 minutes, 20 minutes, you would disagree with that?

DR. MARK HEATH: Well, I – I forget, what time was death pronounced?

JEFF MIDDENDORF: Uh, you said that the EKG said 7:21 p.m.

DR. MARK HEATH: But that's not the pronouncement of death. Death was pronounced at a later time.

JEFF MIDDENDORF: It was pronounced at 07:28.
DR. MARK HEATH: And it started – the drug started at 07:16?
JEFF MIDDENDORF: Yes.
DR. MARK HEATH: So that's 12 minutes. So that, the, I think – I assume death was pronounced by a physician.
JEFF MIDDENDORF: It was pronounced by the Coroner. And just so you are aware, Dr. Hiland, who was also there, said it was about eight or nine minutes that they watched the monitor before the death was actually pronounced. So if you go by that, he was pronounced dead, dead, seven minutes, I guess, after you said he died at 07:21, according to the EKG.
DR. MARK HEATH: I don't have the numbers in front of me, but I think that sounds right. Started at 07:16, death at – EKG deterioration at 07:21, five minutes later, and then you said at 07:28, they actually pronounced death. So that seven-minute interlude between – so it just sounds like they're seeing the same thing, yeah, that the EKG was – they watched it for a while.

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JEFF MIDDENDORF: So your testimony is that after five minutes, if these numbers are correct, he was dead.

DR. MARK HEATH: Yes. It depends on death – could he have been resuscitated then? Probably there's a very good chance of it. So is someone who can be resuscitated, who is resuscitatable, are they dead? It gets into (inaudible) semantics.

(Inaudible/mixed voices)

JEFF MIDDENDORF: In an execution, are we trying to resuscitate after that?

DR. MARK HEATH: My understanding is that there are situations where a stay or commutation or other mechanisms can arise, that there would be absolutely a need to resuscitate. There are other states that have fully brought that into play and are taking steps to achieve that if necessary.

JEFF MIDDENDORF: How many stays are you aware of taking place during an execution – uh, during all your research?

DR. MARK HEATH: I believe there is one in California, where they had started the – this was a gas chamber execution, where they have started to the process and then –

JEFF MIDDENDORF: So one that you are aware of?

DR. MARK HEATH: Well, you are interrupting me.

JEFF MIDDENDORF: I am sorry, go ahead.

DR. MARK HEATH: There is also a situation I'm aware of in Nevada where I believe it was a volunteer who I think (inaudible) had the time to request an appeal, or I'm not sure of the legal

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language, but to, in effect, stay the execution themselves by saying they wanted it to be stopped, that they wanted to pursue appeals. And that that inmate did that after the flow of drugs was initiated.

JEFF MIDDENDORF: Okay, so you're aware of two that actually happened during an – during an execution, once the first drug went through?

DR. MARK HEATH: But it's not an area I've looked into

formally. I'm aware of two, yes.
JEFF MIDDENDORF: Are you aware of how many executions took place in the last 10 years by lethal injection?
DR. MARK HEATH: I don't know the exact number, but several hundred.
JEFF MIDDENDORF: I don't have any further questions.
JUDGE ROGER CRITTENDEN: Mr. Barron?
DAVID M. BARRON: Yes, Your Honor. May I approach the witness?
JUDGE ROGER CRITTENDEN: Yes.
DAVID M. BARRON: For the record, I am showing you a copy of what's been entered into as Defendants' Exhibit 4. Referring you to the second column, the paragraph that begins with "Objective Death," could you read that to the court, please?
(Inaudible voice)
JUDGE ROGER CRITTENDEN: Yes, I have. Go ahead.
DR. MARK HEATH: It says, um, "Objective death with anesthesia monitoring by a dedicated monitor or add-on to

existing equipment, used properly, can potentially help to prevent awareness. The ideal monitor would meet a number of criteria, including, one, it indicates the stage during light anesthesia preceding conscious awareness; two, closely reflects changing concentrations of anesthetic agents; three, sensitive to stimuli of different modalities, especially, surgical stimulation; four, high temporal resolution with real-time presentation of results; and five, able to stage the depth of anesthesia for all anesthetics on a common scale."

DAVID M. BARRON: Thank you. Dr. Heath, could a person with three milligrams per liter of thiopental in their body wake up in less than five minutes?

DR. MARK HEATH: A person with three milligrams per liter of thiopental in their body could be awake at the time they have that concentration.

DAVID M. BARRON: Thank you.

JUDGE ROGER CRITTENDEN: At the risk of prolonging, let me ask a couple of questions. Is the, is the – the BIS monitor, is that an anesthesiological standard for

hospitals at the present
20 time?
21 DR. MARK HEATH: That's a very interesting question that a
22 lot of anesthesiologists are interested in. There are some who
23 are advocating that that become what we call "standard of care,"
24 and there are others who are saying that that is not warranted.
25 So it's been widely deployed, but it is not, for example, like

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1 the EKG or blood pressure cuff which are considered to be the
2 mandatory standards of care.
3 JUDGE ROGER CRITTENDEN: Let me just ask it this way. I
4 take it in a, in a malpractice action, would your testimony be
5 that an anesthesiologist who did not use a BIS monitor violated
6 the standards of care?
7 DR. MARK HEATH: (Inaudible) double negative. If I
8 were asked – an anesthesiologist who had a patient who had
9 consciousness awareness and was being sued, and who had not used
10 a BIS monitor, I would not say they had committed malpractice by
11 not using a BIS monitor.

JUDGE ROGER CRITTENDEN: The other, other area, Doctor, you were very careful in some of your descriptions of your drugs, and you did mention that you thought there were other drugs that would be less painful. Is it your understanding that you would be prohibited by ethical considerations from accepting a contract with the Commonwealth of Kentucky to devise a less painful lethal injection system? Or could an anesthesiologist do that?

DR. MARK HEATH: Another complicated question that physicians and anesthesiologists debate. I believe that legally an anesthesiologist could opine upon it. I believe that there are professional ethics or guidelines which would advise or counsel against doing that.

JUDGE ROGER CRITTENDEN: The other, the other area I have is, what would be, in your opinion, the reaction, physical reaction, of a condemned inmate if that inmate was only given

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three grams of sodium thiopental and then the potassium chloride

after the saline solution?
DR. MARK HEATH: If successfully administered, the
thiopental would render them deeply unconscious, to the point
where no stimulation, even the very painful stimulation of
potassium, would cause any response. Um, it is possible that the
potassium might make their body move involuntarily even though
they were deeply unconscious. But again, they would not have the
(inaudible) experience (inaudible) three grams of thiopental, it
would be completely humane.
JUDGE ROGER CRITTENDEN: Are you saying there would be
involuntary movements of the body, or, or it's your opinion there
will be no involuntary movement?
DR. MARK HEATH: I don't actually know the answer. I think
it's quite possible that there would be involuntary movements,
but I can't, um, I can't say for sure.
JUDGE ROGER CRITTENDEN: Okay. All right. Anyone have any
questions based on that?
MALE VOICE: No, Your Honor.
JUDGE ROGER CRITTENDEN: Thank you, Doctor. You're excused.
Thank you.
THEODORE S. SHOUSE: That's all we

have for today, Judge.

JUDGE ROGER CRITTENDEN: For today, uh –

THEODORE S. SHOUSE: 9:30 tomorrow?

JUDGE ROGER CRITTENDEN: 9:30 a.m. tomorrow. What, what – let me ask you the schedule.

* * * *

IN THE CIRCUIT COURT
FOR FRANKLIN COUNTY
COMMONWEALTH OF KENTUCKY

RALPH BAZE, and, THOMAS C. BOWLING, Plaintiffs, v. JOHN D. REES, Commissioner, Kentucky Department of Corrections, Frankfort, Kentucky GLENN HAEBERLIN, Warden, Kentucky State Penitentiary, Eddyville Kentucky, and, UNKNOWN EXECUTIONERS. Defendants.	CIV. ACTION 04-CI-01094

May 2, 2005

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* * * *

Dr. Dershwitz

JEFF MIDDENDORF: (Inaudible) Doctor, could you briefly identify why your experience is uniquely relevant to this particular case on the Constitutionality of the substances of drugs used in the Commonwealth?

DR. MARK DERSHWITZ: Well, first of all, two of the medications that are used as part of the lethal injection protocol are medications that are routinely used by anesthesiologists for the normal conduct of general anesthetic in a, in a person. Uh, in addition, my major area of research interest over the last 15 years has been to study both the time

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course and the effects of intravenous anesthetic agents like thiopental.

JEFF MIDDENDORF: Can you define the difference between pharmacokinetics and pharmacodynamics?

DR. MARK DERSHWITZ: Pharmacokinetics is the study of the

time course of medication, and pharmacodynamics is the study of the effects of a medication, uh, on a person.

JEFF MIDDENDORF: So that would be important in the discussion that we're having today.

DR. MARK DERSHWITZ: Yes.

JEFF MIDDENDORF: Okay. Um, and have you researched and published articles on these two issues?

DR. MARK DERSHWITZ: Yes, I have.

JEFF MIDDENDORF: Have you researched and published any articles on sh – short-acting hypnotics?

DR. MARK DERSHWITZ: Yes, I have.

JEFF MIDDENDORF: Okay. And what typically would those type of research papers discuss?

DR. MARK DERSHWITZ: Well, for example, a typical research protocol might involve a volunteer human who is given a medication, and blood samples are drawn to measure the time course of the medication's effect as well as to measure certain effects of the medication, like, for instance, whether or not they're asleep.

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JEFF MIDDENDORF: Would you consider the type of drugs that

you've studied to be short-acting barbiturates like sodium thiopental?

DR. MARK DERSHWITZ: Similar, yes.

JEFF MIDDENDORF: Have you received materials in, in anticipation of your testimony today?

DR. MARK DERSHWITZ: Yes.

JEFF MIDDENDORF: Could you please tell us what you received?

DR. MARK DERSHWITZ: I received a, uh, detailed protocol for the, um, carrying out of the lethal injection in Kentucky. I also received a number of autopsy reports, both from Kentucky and from other states, uh, (inaudible) give a injection previously that contained, uh, toxicology reports, uh, from their autopsies.

JEFF MIDDENDORF: Did your research, did, did your research and your professional experience assist you in analyzing these materials?

DR. MARK DERSHWITZ: Yes.

JEFF MIDDENDORF: Do you now consider yourself familiar with Kentucky's form of lethal injection?

DR. MARK DERSHWITZ: Yes, I do.

JEFF MIDDENDORF: And what are the three drugs the Commonwealth uses in execution by lethal

injection?
24 DR. MARK DERSHWITZ: The first medication is thiopental,
25 which is classified as a hypnotic agent; that means it renders
26 the person unconscious. The second medication is pancuronium,

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1 which is a paralytic agent that causes paralysis of skeletal
2 muscle. And the third agent is potassium chloride, which in this
3 case is given at a high dose in order to cause, uh, cessation of
4 the electrical activity of the heart.
5 JEFF MIDDENDORF: And in the amounts that Kentucky
6 administers, is each drug lethal in itself?
7 DR. MARK DERSHWITZ: Yes.
8 JEFF MIDDENDORF: Let's start with the first drug, sodium
9 thiopental, three grams. Have you analyzed how this drug affects
10 a person when administered?
11 DR. MARK DERSHWITZ: Yes.
12 JEFF MIDDENDORF: Could you please tell me about your
13 analysis?
14 DR. MARK DERSHWITZ: Well, when a human of average size –
15 and I, I typically use 80 kilograms as the, um, size of the

16 average human – is given a three-gram injection of thiopental,
17 unconsciousness will occur in less than a minute, and the person
18 will remain unconscious, uh, for hours afterward.
19 JEFF MIDDENDORF: What is the usual dose to induce general
20 anesthesia in an, in an average person?
21 DR. MARK DERSHWITZ: Well, again, if we had an 80-kilogram
22 person presenting for surgery, a typical dose of thiopental for
23 an anesthetic would be about 300 milligrams.
24 JEFF MIDDENDORF: And how long would a dose to induce
25 general anesthesia last if nothing else were given to the
26 patient?

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1 DR. MARK DERSHWITZ: Well, on average, a dose of 300
2 milligrams will cause an average person to be unconscious for
3 about eight minutes.
4 JEFF MIDDENDORF: And how long should it take an individual
5 to become unconscious if given a anesthesia – or a dose to get
6 general anesthesia?
7 DR. MARK DERSHWITZ: Uh, again, less than a minute.

JEFF MIDDENDORF: Have you ever given a three-gram dose of sodium thiopental to a patient?

DR. MARK DERSHWITZ: Yes, a few times in my career. The three-gram dose would be used in a situation where we're trying to achieve what's called "brain protection." And in a situation where a patient is having nerve surgery in which there is going to be the planned interruption of blood flow to the brain, giving a large dose of a barbiturate like thiopental can make it less likely that the person will have a stroke during the surgery. So, uh, I have given three grams of thiopental to a patient in such circumstances. In this sort of operation, first of all, the three-gram dose of thiopental is not given as rapidly as it would be during an execution because the effect on the heart in terms of blood pressure and cardiac output is so significant that a person would be difficult to resuscitate. So, when I give three grams of thiopental as part of a neurosurgical procedure, it's typically given over approximately 10 to 15 minutes, and that

26 makes, uh, management of the blood pressure easier.

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1 JEFF MIDDENDORF: What, what other type of measures would
2 you have to take to keep somebody alive if given a three-gram
3 dose?
4 DR. MARK DERSHWITZ: I'd have to give medications both to
5 keep the blood pressure up and to make the heart pump stronger,
6 so –
7 JEFF MIDDENDORF: And would it be significant steps?
8 DR. MARK DERSHWITZ: Yes. And after a three-gram dose in
9 this scenario, the person generally sleeps for hours after their
10 operation is over.
11 JEFF MIDDENDORF: Have you prepared graphs to demonstrate
12 your analysis for your testimony today to indicate how long
13 someone would be unconscious with a three-gram dose of sodium
14 thiopental?
15 DR. MARK DERSHWITZ: Yes, I have.
16 JEFF MIDDENDORF: Your Honor, I would like to mark this as
17 Commonwealth Exhibit 6.
18 THEODORE S. SHOUSE: I have no objection

to (inaudible) .
JUDGE ROGER CRITTENDEN: All right.
JEFF MIDDENDORF: (Inaudible). We would ask that be
admitted without objection.
THEODORE S. SHOUSE: No objection.
JUDGE ROGER CRITTENDEN: So ordered.
JEFF MIDDENDORF: Doctor, can you please explain the
Graph that you've put together to, I guess, depict level of
unconsciousness and the time period?

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DR. MARK DERSHWITZ: Okay. On this graph, the X-axis is
time in hours, and I carried it out through 10 hours. And on the
Y-axis is the probability that an average person of 80 kilograms
would be unconscious, uh, following a three-gram dose of
thiopental. And in order to make the Y-axis more easily
visualized, notice that that's a log axis, not a, uh, not a
linear axis.
And so what this shows is that the overwhelming probability
– well over 99 percent of people – are going to be unconscious,
uh, for hours after a, a three-gram dose of thiopental. And the

point at which five percent of the population would wake up, or
95 percent of the population would remain asleep, is about two
and a third hours following such a dose of thiopental. And
approximately 50 percent of the population will awaken after
about four and two-thirds hours.
JEFF MIDDENDORF: Can you please talk about the – the way
you come up with these numbers, the methodology to it?
DR. MARK DERSHWITZ: Okay. Um, the way that this is done is
a computer prediction based upon published experiments in normal
humans in which they're given drugs like thiopental, and the time
course of the drug's effect and of the drug's course throughout
the body is measured. So, in the typical experiment, uh,
a person would have an intravenous line placed for the
administration of thiopental. They would also have a needle
put into an artery for blood sampling of thiopental. And the
scientists doing the experiment would also measure whether or

not the person is unconscious by – defined as whether or not they could follow a simple command, such as "raise your right arm" or "raise your left leg." And so, based upon previously published studies on humans given thiopental, I was able to draw this graph based upon giving a dose of three grams of thiopental, knowing how long it should last in the body and knowing what, what concentrations are associated with, uh, unconsciousness or unconsciousness.

JEFF MIDDENDORF: So, so, given your graph, uh, you predict that they will be unconscious for at least two hours. An indivi- – an individual would be unconscious for at least two hours –

(inaudible/mixed voices)

DR. MARK DERSHWITZ: Ninety-five percent of the population will be unconscious for more than two hours. Um, well, over 99 percent of the population will be unconscious for more than an hour.

JEFF MIDDENDORF: Is sodium thiopental a, a constant – or a consistently behaving drug that you can rely upon?

DR. MARK DERSHWITZ: Yes.

JEFF MIDDENDORF: What is the likelihood of a person not behaving consistently after receiving this drug?
DR. MARK DERSHWITZ: Well, it's relatively small. There are some people who may have some tolerance to the medication. Uh, for instance, a person who takes a barbiturate for prevention of epileptic seizures might have some tolerance, cross-tolerance, to thiopental. But that cross-tolerance would be of the

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magnitude of a factor of two or three, typically. So, if I were to give anesthesia to someone like that, if it takes 300 milligrams as a typical dose to put an 80-kilogram person to sleep, and I had a patient who was taking a barbiturate for prevention of epileptic seizures, um, I might have to give six or seven hundred milligrams, uh, you know, a factor of two, to two and a half, to three, in order to have them, uh, reliably go to sleep. Um, but in the case of the sort of dose that's being used for lethal injection, that's still so far, a ten-fold

factor
higher than what's typically used, that even in somebody with an
inherent tolerance, there's still a very, very high probability
that they're going to remain unconscious for a long time.
JEFF MIDDENDORF: One drug that has been mentioned before is
Propofol. Um, what is the difference between sodium thiopental
and Propofol?
DR. MARK DERSHWITZ: Propofol is a shorter-acting drug,
which is why it's more commonly used in anesthesia today, because
we typically want our patients to wake up quicker so they can be
more quickly discharged from the hospital. So, uh, Propofol is
used more commonly than thiopental because thiopental is longer
lasting.
JEFF MIDDENDORF: Uh, is it a fair statement to say that,
uh, sodium thioma – thiopental – is not used as much today
because it has a longer hangover effect?
DR. MARK DERSHWITZ: Yes.

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JEFF MIDDENDORF: Okay. And can you please explain the

hangover effect that sodium thiopental displayed –
DR. MARK DERSHWITZ: Well, because –
JEFF MIDDENDORF: – or displays.
DR. MARK DERSHWITZ: – the drug –
JEFF MIDDENDORF: I'm sorry.
DR. MARK DERSHWITZ: Even after the person wakes up,
they still have residual effects to the drug, um, and that,
quote/unquote, "hangover effect" is residual sleepiness. And
so if a person is having ambulatory surgery, the goal is to
have them as wide awake as possible so that they can leave the
hospital as quickly as possible. And we can achieve that more
quickly with a shorter-acting drug like thiopent – like Propofol,
as compared to an older drug like thiopental.
JEFF MIDDENDORF: Um, pentobarbital has also been mentioned
as an alterative to sodium thiopental. Does it make a difference
which one of these is used if given a three-gram dose of each?
DR. MARK DERSHWITZ: Um, at three grams, the duration of
action of the two medications is not going to be meaningfully
different. At a 300-milligram dose, uh, pentobarbital would be
slightly longer lasting than thiopental, but at

three grams, the
two drugs have about the same duration of action.
JEFF MIDDENDORF: In your expert opinion, is sodium
thiopental a humane component of the lethal injection process?
DR. MARK DERSHWITZ: Yes, it is.

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JEFF MIDDENDORF: After being administered this drug, what
would the inmate's level of awareness be?
DR. MARK DERSHWITZ: Well, after a three-gram dose of
thiopental, the inmate will be unconscious and will remain
unconscious for hours, um, if no other intervention were
performed.
JEFF MIDDENDORF: Uh, one of the things that is often
mentioned is sodium thiopental is an ultra-short-acting drug.
Given at three grams, does it – I know it's classified as
that, but the effects are much longer lasting, is that a fair
statement?
DR. MARK DERSHWITZ: Yeah. I think the term "ultra-short-
acting" is just by a comparison to the other barbiturates. The

14 classical pharmacology definitions of barbiturates are long,
15 intermediate, and short. And so Phenobarbital, which is used
16 in epilepsy therapy, is classified as a long-acting drug. And
17 Secobarbital, which used to be used, but rarely today, as a
18 night-time sedative, was an intermediate-acting drug. And
19 thiopental and methohexitol were classified as short-acting
20 drugs. And those terms are in relation to each other. But
21 when thiopental is given in a three-gram dose, it is not a
22 short-acting drug. It lasts for many hours.
23 JEFF MIDDENDORF: You said that you've reviewed the
24 materials that we use here in Kentucky. Is it important that
25 sodium thiopental be given first in that series of drugs?
26 DR. MARK DERSHWITZ: It's critical that it be given first.

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1 JEFF MIDDENDORF: And in your expert opinion, what's the
2 likelihood that the drug eliminates any unpleasant effects from
3 the following two drugs?
4 DR. MARK DERSHWITZ: Well, after a three-

gram dose of
thiopental, the inmate is unaware of his or her surroundings
completely. And so nothing that happens to the inmate after
the thiopental is given is perceptible to the inmate.
JEFF MIDDENDORF: Are you familiar with the second drug in
the series Kentucky uses, pancuronium bromide?
DR. MARK DERSHWITZ: Yes, I am.
JEFF MIDDENDORF: Can you comment, uh, how the pancuronium
bromide of 50 milligrams will affect an individual?
DR. MARK DERSHWITZ: Pancuronium bromide is a paralytic
agent; and, therefore, it impairs the function of skeletal
muscle. So, in surgery it is typically given to make surgery
easier in terms of causing muscle relaxation. It means the
surgeon doesn't have to work as hard if the chest or the belly
is open. And it also causes the cessation of breathing. But
in the case of in a lethal injection protocol, the primary effect
of the pancuronium will be to decrease the involuntary muscle
activity that will be subsequently caused by the administration

of potassium chloride.
JEFF MIDDENDORF: Would this high does of pancuronium
bromide increase or decrease the time it takes to paralyze an
individual?

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DR. MARK DERSHWITZ: The onset of paralysis is a function of
the dose. So, a normal paralytic dose in a human is seven to
10 milligrams, for surgery. So, the dose that's being used in
this protocol would have a more rapid onset because it's so much
larger.
JEFF MIDDENDORF: What type of awareness or experience of
the effects of the pancuronium bromide would an inmate expect to
experience or perceive after three grams of sodium thiopental?
DR. MARK DERSHWITZ: None. Because, as I said, after a
three-gram dose of thiopental, nothing that happens to the inmate
after that will be perceptible to the inmate.
JEFF MIDDENDORF: If pancuronium bromide were eliminated
from the Kentucky protocol and an in- – inmate received three
grams of sodium thiopental and 240

milliequivalents of potassium
15 chloride, what would someone viewing the execution witness?
16 DR. MARK DERSHWITZ: Well, the, the administration of the
17 potassium chloride would still cause the cessation of electrical
18 activity of the heart, and the heart would stop beating in
19 approximately the same time that it would under the current
20 protocol. The difference is that the potassium chloride would
21 also cause spontaneous muscle movement that is due to a direct
22 effect of potassium chloride on, uh, muscle tissue, and so the
23 inmate would appear to thrash or twitch. Um, and even though
24 the inmate is unconscious and wouldn't feel this, uh, this could
25 be perceived by lay witnesses as suffering or discomfort.

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1 JEFF MIDDENDORF: So, in your expert opinion, if you took
2 that out, even if the inmate had these reactions, they would not
3 feel any pain whatsoever.
4 DR. MARK DERSHWITZ: No, after three grams of thiopental,
5 nothing that happens after that to the inmate

will be perceptible
6 to the inmate.
7 JEFF MIDDENDORF: The third drug, potassium chloride,
8 240 milliequivalents, can you comment on the action of that drug?
9 DR. MARK DERSHWITZ: Potassium is a necessary chemical for
10 life. And if the level of potassium in the blood is either too
11 high or too low, uh, the heart will not beat properly, as well
12 as many other biological processes will not occur properly. And
13 when the blood concentration of potassium is raised by giving a
14 rapid injection, the electrical activity in the heart is stopped
15 quickly and the heart stops pumping almost immediately.
16 JEFF MIDDENDORF: There's been testimony that pancuronium
17 bromide might interact with sodium thiopental and then eliminate
18 each other by precipitating. Do you have any comments on that?
19 DR. MARK DERSHWITZ: Well, it is true that because
20 thiopental in solution is a pH 10 and pancuronium is a pH 4,
21 if they physically mix with one another, there will – there
22 will be a precipitation reaction in which the pancuronium will

precipitate and will be rendered inactive.
JEFF MIDDENDORF: Do you have a – does it make a difference
since Kentucky uses 3,000 milligrams of sodium thiopental and

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50 milligrams of pancuronium bromide? If anything precipitates,
are you going to lose any of the sodium thiopental?
DR. MARK DERSHWITZ: Well, you'll use approximately
50 milligrams of the sodium thiopental effect, leaving, leaving
approximately 2,950 milligrams of thiopental to act after it
directly, uh, precipitated the, uh, the 50 milligrams of, uh,
pancuronium.
JEFF MIDDENDORF: Is that more than enough to render someone
unconscious for a significant period of time?
DR. MARK DERSHWITZ: Yes.
JEFF MIDDENDORF: Would you say up to two hours?
DR. MARK DERSHWITZ: At least.
JEFF MIDDENDORF: Does the saline flush assist in assuring
These medications act appropriately?
DR. MARK DERSHWITZ: Yes, because the volume in the saline
flush is larger than the volume contained in the

IV tubing. So,
17 when each medication is followed by a saline flush, it prevents
18 the subsequent medication from mixing physically with the
19 medication that was given previously.
20 JEFF MIDDENDORF: Given the way the drugs are administered
21 in Kentucky – the three-drug combination with the saline flush –
22 how quickly is a prisoner actually put to death in this
23 combination of an actual person, or an average person, in your
24 opinion?
25 DR. MARK DERSHWITZ: The answer to this question is, is
26 difficult because it depends a little bit on the definition

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1 of "death." In medicine, we really don't have a really good
2 definition of the exact moment at which death occurs in a
3 scenario like this. But what I can say is since the medications
4 given one following the other typically occur in a four- to
5 five-minute period, as soon as the potassium chloride circulates,
6 the heart stops. And at that point, the lack of circulation is

going to effectively cause the inmate's death.
JEFF MIDDENDORF: And I assume that in your career you have
either pronounced people dead or been around when others have
pronounced an individual dead.
DR. MARK DERSHWITZ: Yes.
JEFF MIDDENDORF: Is that correct? Um, even though, if
somebody were to hit a tree on a motorcycle and die on the
scene, and be brought in, uh, to the hospital, when would be
the official time of death?
DR. MARK DERSHWITZ: Usually when the person is first seen
by a physician and the physician realizes that the, you know,
accident victim is not resuscitatable, they pronounce them dead.
JEFF MIDDENDORF: Do you have an opinion as to whether or
not these three drugs, uh, when used in the combinations that we
have in Kentucky, and the volumes indicated in, in the Execution
Manual, cause undue pain and suffering during an execution by
lethal injection?
DR. MARK DERSHWITZ: Uh, they do not, because from the
inmate's point of view it's no different than undergoing a
general anesthetic for surgery.

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JEFF MIDDENDORF: Do you have an opinion as to whether or not these three drugs used in the series and in the volumes indicated in the Manual are medically a humane form of execution?

DR. MARK DERSHWITZ: They are, for the same reason.

JEFF MIDDENDORF: Okay. If I could turn your attention to the materials of Dr. Heath that were submitted to you. Do you have his CV? Did you have the opportunity to look at that?

DR. MARK DERSHWITZ: Yes, I did.

JEFF MIDDENDORF: Judge, and I don't remember what we marked that as.

JUDGE ROGER CRITTENDEN: (Inaudible)

JEFF MIDDENDORF: If I could approach, Your Honor.

JUDGE ROGER CRITTENDEN: Yes, please, (inaudible).

JEFF MIDDENDORF: Judge, do you need another copy of this?

JUDGE ROGER CRITTENDEN: No, no, we have one.

JEFF MIDDENDORF: Doctor, if you could just please give a comparison of your credentials as to Dr. Heath.

DR. MARK DERSHWITZ: Well, like myself,

Dr. Heath is a – is
19 a physician, and he's also trained in anesthesiology and he's
20 Board certified in anesthesiology. He also does research, and
21 his major area of research interest is on the mechanisms of pain.
22 Um, I would say that my research on the pharmacokinetics and
23 pharmacodynamics of intravenous anesthetic agents is more germane
24 to the, uh, the topic that's under discussion today.
25 JEFF MIDDENDORF: There has been previous testimony that
26 there were no visible signs of infiltration in the Eddie Lee

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1 Harper case. All who have testified here, viewed the execution,
2 stated that Mr. Harper became unconscious almost immediately.
3 Dr. Corey, the State Medical Examiner, was able to draw blood
4 levels from various sites both above and below the diaphragm,
5 and that Dr. Heath noticed nothing out of the ordinary on
6 Mr. Harper's EKG until one minute after the potassium chloride
7 was pushed. Given that, can you say to a medical degree of

reasonable – reasonable certainty that the drugs entered Mr. Harper's body properly?

DR. MARK DERSHWITZ: Yes, they did.

JEFF MIDDENDORF: And you were also able to review Eddie Lee Harper's autopsy results?

DR. MARK DERSHWITZ: Yes.

JEFF MIDDENDORF: Did you prepare a graph to show sodium thiopental going into a, an individual?

DR. MARK DERSHWITZ: Yes.

JEFF MIDDENDORF: This is #7, I believe, Your Honor. May I approach?

JUDGE ROGER CRITTENDEN: Yes, please.

JEFF MIDDENDORF: Can you please explain to the Court what this graph shows?

DR. MARK DERSHWITZ: Okay, this, this graph is different than the one I previously showed because you'll note that there are no numbers on the X- or the Y-axis. And the reason for that is that it's very difficult to do predictions on the venous concentration of a medication following a dose of thiopental of

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three grams because of the enormous effect on the heart's ability

to pump. But this graph is loosely based upon some research that I've done in the past where arterial and venous blood samples were obtained simultaneously in people given intravenous medications. And there are certain things that we do understand very well.

When medications are given and the blood samples are attained simultaneously from an artery and from a vein, shortly after the medication is administered, the arterial concentration will be much higher. And with anesthetic drugs, it's the arterial concentration which reflects what's actually going on in the brain. The venous concentration will never be as high as the arterial concentration. And furthermore, there will be a lag time between the time that the drug peaks in the arterial circulation as compared to the venous circulation.

So even though I don't actually have the X-axis quantitated in terms of time, the time frame is, is hours, not seconds or minutes. And you can see that the dotted line, which reflects the venous concentration of an IV drug, is going

to be much lower
than the arterial concentration and it's going to peak several
minutes later.
Now, this graph is based upon the effects of a typical
anesthetic dose of thiopental, which is approximately
300 milligrams. I do not have the capability, and I don't
think anybody else who is expert in kinetics and dynamics, has
the capability of predicting what's going to be the delay time

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between the arterial and the venous concentrations in a normal
person following such a large dose of thiopental as three grams.
But the time that it's going to take for adequate mixing
throughout the body so that at some point the arterial and
the venous concentrations will approach one another, after
300 milligrams of thiopental, it takes four to six minutes for
adequate mixing throughout the body. I can't tell you how long
it's going to take after three grams, but it's going to be much,
much longer. But I can't be more specific than

that.

JEFF MIDDENDORF: Can you explain how once these drugs are pushed it circulates through the body?

DR. MARK DERSHWITZ: Thiopental is given typically through an arm vein, and so the medication travels from the arm to the heart. It then enters the right side of the heart and it's pumped out to the lungs where the blood is oxygenated. It returns to the left side of the heart and it's pumped out from there.

Now, the heart nourishes itself with blood that is pumped from the left side of the heart. So, the heart will be exposed to the thiopental approximately the same time as the brain will. And after a three-gram dose of thiopental, the heart's ability to pump will be substantially depressed. So, circulation will begin to slow tremendously, but the patient will be unconscious at that point because it will have reached the brain.

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JEFF MIDDENDORF: So, I believe you reviewed Eddie Lee Harper's autopsy results and the levels that

were in both his,
I guess, the heart and also some other sites?
DR. MARK DERSHWITZ: Yes.
JEFF MIDDENDORF: Uh, do you recall the amount that was in
the heart?
DR. MARK DERSHWITZ: I believe it was 6.5 milligrams per
liter.
JEFF MIDDENDORF: And what part of the heart was that taken
from?
DR. MARK DERSHWITZ: That was taken from the right atrium.
JEFF MIDDENDORF: Does that accurate – accurately measure
whether he was conscious or unconscious during the execution?
DR. MARK DERSHWITZ: It has nothing to do with the level of
consciousness because the right atrium is essentially a venous
blood sample, and that concentration is expected to be much, much
lower than what the concentration at the same point and time
would be in the brain.
JEFF MIDDENDORF: What about the sites in the legs or any
Other sites in the body that it's taken from?
DR. MARK DERSHWITZ: The other venous sites have lower
concentrations, and that is also what you would expect.

JEFF MIDDENDORF: Dr. Watson, one of their experts, testified that Eddie Lee Harper could have experienced pain. And he testified that he solely based on that on the, the 6.5 milligrams – or, is it milligrams per liter?

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DR. MARK DERSHWITZ: Yes.
JEFF MIDDENDORF: Okay. Um, do you have an opinion as to the drug levels in the autopsy results?
DR. MARK DERSHWITZ: Well, I think Dr. Watson was misinterpreting the scientific data. As I said before, all of the experiments that have been done where people are given thiopental and effects are measured, all of those experiments that have been published rely on arterial sampling of the blood. And so we know that a concentration of seven milligrams per liter is approximately the concentration at which 50 percent of the people will be awake and 50 percent of the people will be asleep. But that seven milligrams per liter is based upon obtaining a blood sample from an artery, which then reflects the brain

14 concentration. It's not valid to compare concentrations of a
15 drug like thiopental obtained from venous sampling, which is
16 what's done at an autopsy, and use those numbers to try to
17 predict what the brain was experiencing.
18 JEFF MIDDENDORF: He also testified that he would expect a
19 person's blood levels to be right before death three milligrams
20 per liter, as the autopsy levels were the same as Harper's as
21 they ended up. He actually predicted that those thiopental
22 levels would rise, uh, once somebody had died. Do you have an
23 opinion as to that?
24 DR. MARK DERSHWITZ: I believe he must have pulled those
25 numbers out of thin air because there is no scientific data to
26 support that, as far as I know. After a patient or an inmate

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1 dies, circulation has stopped, and so the process of distribution
2 or redistribution, which is the process by which the medication
3 circulates throughout the body and enters and leaves organs, that
4 process stops.

JEFF MIDDENDORF: Dr. Heath testified that sodium thiopental begins to deteriorate immediately. If Kentucky mixes the two drugs two hours prior to an execution, would the effects of sodium thiopental be of any concern?

DR. MARK DERSHWITZ: No. Back in the days when thiopental was the most commonly used intravenous anesthetic, the hospital at which I worked made many liters of it per day in, in large batch, and then at the pharmacy it was stored in 20-milliliter syringes. And the pharmacy marked each of those syringes with an expiration date 72 hours following the time at which it was mixed. So, at the point in time when we were using thiopental regularly in almost all of our patients, when the pharmacy prepared it for us, they deemed a 72-hour expiration date safe for all of our patients.

JEFF MIDDENDORF: One thing that has been suggested is a BIS monitor. Do you have any experience with a BIS monitor?

DR. MARK DERSHWITZ: Uh, I actually do. I was one of the investigators that assisted Aspect Medical Systems in the

development of, uh, of this monitor. The BIS monitor is an EEG monitor in which a series of EEG electrodes are put across the patient's forehead, and the machine measures the EEG waves and uses an algorithm to present the clinician with a number that

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correlates with the likel' od of a particular patient being conscious or unconscious. And this is a monitor that is becoming more and more commonly used in anesthesia for surgery because awareness under anesthesia, while rare, is still something that we are endeavoring to make even rarer. Now, you asked me about the possibility of employing a BIS monitor during an execution to confirm that the inmate would be unconscious. And I see one theoretic problem with that. And I have to admit I am speaking purely from a theoretical basis now because we've never taken with – a patient under anesthesia and given them this much potassium chloride as you are doing during an execution. But knowing what I know about how potassium

chloride acts, since the BIS monitor is measuring very, very tiny voltages on the forehead that are coming from the brain, when the potassium chloride causes widespread stimulation of skeletal muscle, I expect that those voltages that will be produced will overwhelm the EEG voltage that the monitor is trying to measure. And I would predict that a significant artifact would be introduced into the monitor's ability to assess consciousness.

JEFF MIDDENDORF: So, what, in laymen's term you're saying it might give a perception that they are aware, even though they aren't.

DR. MARK DERSHWITZ: Well, actually, what I think is going to happen is when the monitor detects artifact, it stops display of the depth of anesthesia. In other words, it has an algorithm

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that looks for artifact, and when it detects artifact, it stops displaying data. So, what I think is going to happen if a BIS monitor were used during an execution, is once

the potassium
chloride caused skeletal muscle to be stimulated, the digital
readout from the BIS monitor, I believe, will go blank.
JEFF MIDDENDORF: If you took pancuronium bromide out and
still used a BIS monitor, and there were some involuntary muscle
reaction, would that show consciousness on the BIS monitor?
DR. MARK DERSHWITZ: Uh, uh, again, it – it could possibly
show evidence of consciousness, but I think more likely the
digital readout will go blank.
JEFF MIDDENDORF: Okay. What about the use of a pressure
cuff during an execution?
DR. MARK DERSHWITZ: Well, I expect that three grams of
thiopental are going to cause the inmate's blood pressure to
become very, very low. So, if a blood pressure cuff were placed
on the inmate's arm, and hooked up to one of the automated
machines that's used for measuring blood pressure, I suspect
that the machine would be unable to measure blood pressure at
all, because these machines are not accurate at the extremes of
blood pressure. It might be possible to take

blood pressure the
22 old-fashioned way, meaning a person places a stethoscope on the
23 arm just below the blood pressure cuff and listens for sounds.
24 It might be possible to take a blood pressure that way. But,
25 I think using an automated machine is probably not going to be
26 successful.

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1 JEFF MIDDENDORF: But given three grams of sodium
2 thiopental, would either of these make a difference?
3 DR. MARK DERSHWITZ: Make a difference in terms of how?
4 JEFF MIDDENDORF: Determining – if – if it were given
5 properly, three grams of sodium thiopental, would a – would –
6 would a blood pressure cuff or a BIS monitor have any usefulness
7 on whether the person is conscious or not because you know what
8 the result is going to be?
9 DR. MARK DERSHWITZ: Well, first of all, blood pressure does
10 not correlate with consciousness very well at all. But if the
11 blood pressure were to drop to nearly unmeasureable levels, it

just confirms the fact that the thiopental is doing what we
expect it to do. But I don't think that measuring blood pressure
is going to be confirmatory in terms of the likelihood that the
inmate is conscious or unconscious.
JEFF MIDDENDORF: Do people other than doctors and nurses
insert IVs in hospitals?
DR. MARK DERSHWITZ: Yes.
JEFF MIDDENDORF: How often does that take place?
DR. MARK DERSHWITZ: All the time.
JEFF MIDDENDORF: Would it be a fair statement to say
that often medical residents are taught how to insert IVs by
phlebotomists or members of the IV teams in hospitals?
DR. MARK DERSHWITZ: Yes. Today, because medical residents
are supposed to be taking care of patients and doing less, as
we call it, "scut work" than they did years before, almost all

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hospitals now have teams of technicians for doing things like
putting in IVs and doing other things that the interns and the
residents used to have to do. And so, most

hospitals now have
IV teams that are made up of technicians who, um, draw blood, who
put IVs in, and do things like that.
JEFF MIDDENDORF: And if those people have the, the
experience that is needed, they can certainly insert an IV.
DR. MARK DERSHWITZ: Yes, um-hm [yes].
JEFF MIDDENDORF: Do you have an – an opinion as to whether
the drugs used in Kentucky's execution protocol will result in a
humane death?
DR. MARK DERSHWITZ: I believe they do.
JEFF MIDDENDORF: I have no further questions, Your Honor.
JUDGE ROGER CRITTENDEN: Thank you. Mr. Shouse?
THEODORE S. SHOUSE: Judge, can we take a five-minute break
before my cross-examination?
JUDGE ROGER CRITTENDEN: Well, we're going to take about a
15-minute break probably in about 30 minutes, so.
THEODORE S. SHOUSE: Okay, that's fine. That's fine. I can
start now.
JUDGE ROGER CRITTENDEN: Well, uh, I didn't tell you all,
but at some point in time, as soon as Ms. [Jones] get finished
with the jury, I've got to talk to the new jury for

about
24 15 minutes.
25 THEODORE S. SHOUSE: Yes, sir.

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1 JUDGE ROGER CRITTENDEN: And, then I – we'll probably recess
2 about 12:00 anyway because the District Court is going to do
3 arraignments.
4 THEODORE S. SHOUSE: Yes, sir. I – I think we'll be
5 finished by noon.
6 JUDGE ROGER CRITTENDEN: Okay.
7 THEODORE S. SHOUSE: (Inaudible). Okay. Good morning,
8 Doctor.
9 DR. MARK DERSHWITZ: Good morning.
10 THEODORE S. SHOUSE: We, uh, we were briefly introduced
11 this morning, but, again, my name is Ted Shouse, and along
12 with Mr. Barron and Ms. Balliet, we represent Mr. Baze and
13 Mr. Bowling. Now, first of all, I just want to talk about one
14 thing you said on your direct examination, and I'm sorry I don't
15 have enough xeroxes for this. I didn't think this was going to
16 come up (inaudible). Um, my I approach the witness?
17 JUDGE ROGER CRITTENDEN: Please

18 THEODORE S. SHOUSE: Take a look at that, please. Can you
19 read – and again I'm sorry I don't have enough xeroxes. I didn't
20 think it was going to come up. Now, now, you testified on direct
21 that where you used to work they would mix up a big batch of
22 sodium thiopental and that you were under the impression that
23 the, um, uh, pharmacist said it could be used for 72 hours?
24 DR. MARK DERSHWITZ: That's correct.
25 THEODORE S. SHOUSE: Okay. Can you take a look at this,
26 which was provided as part of discovery? And I assume what this

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1 is is part of the package insert for the thiopental sodium. Can
2 you read right over here on the right-hand side where it says
3 "Contents should"?
4 DR. MARK DERSHWITZ: Yes. It says, "Contents should
5 be completely reconstituted and used within 24 hours," and
6 that's based upon the information from the manufacturer. At
7 Massachusetts General Hospital, where I used to work, the
8 pharmacy did its own stability studies and

convinced themselves
9 that 72 hours was a safe time to label the syringes for their
10 expiration. And so, based upon their published, uh, study, a
11 72-hour expiration time was, uh, more reasonable than 24 hours.
12 THEODORE S. SHOUSE: Okay. But this manufacturer says use
13 it within 24.
14 DR. MARK DERSHWITZ: Correct, because they didn't do long
15 enough stability studies.
16 THEODORE S. SHOUSE: Does it say anything about stability
17 studies on here?
18 DR. MARK DERSHWITZ: No, but I know that that's what they
19 reported to the FDA.
20 THEODORE S. SHOUSE: Okay. But this says 24 hours.
21 DR. MARK DERSHWITZ: Yes.
22 THEODORE S. SHOUSE: Okay. I believe you also testified
23 that if the sodium thiopental and the potassium chloride were
24 used without the Pavulon – is it okay if I call it Pavulon
25 instead of pancuronium bromide?

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1 DR. MARK DERSHWITZ: You, you could, but it's very unlikely

that Pavulon is the medication being given to the inmate.

THEODORE S. SHOUSE: Okay, we'll call it pancuronium bromide then. Now, did you testify that if sodium thiopental in the amounts designated in the protocol and potassium chloride were used without the pancuronium bromide, that, um, it would in – it would kill the inmate. Is that correct?

DR. MARK DERSHWITZ: Yes.

THEODORE S. SHOUSE: And did you also testify that it wouldn't hurt any more than what's currently in place. Is that correct?

DR. MARK DERSHWITZ: Yes.

THEODORE S. SHOUSE: Okay. Now, you're a Board certified anesthesiologist?

DR. MARK DERSHWITZ: Yes.

THEODORE S. SHOUSE: And you have a Doctor of Pharmacology degree, right?

DR. MARK DERSHWITZ: Yes.

THEODORE S. SHOUSE: You don't have a Doctor of Pharmacy degree.

DR. MARK DERSHWITZ: No.

THEODORE S. SHOUSE: Okay. Well, what privileges do you enjoy at University of Massachusetts Medical Center?

DR. MARK DERSHWITZ: I'm a staff anesthesiologist.
THEODORE S. SHOUSE: Okay. Okay. So, you – you induce general anesthesia.

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DR. MARK DERSHWITZ: I give all kinds of anesthesia.
THEODORE S. SHOUSE: Okay. Spinal anesthesia?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. Um, central lines? You ins – you can insert a central line?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. Um, and ideally, in your professional experience on a day-to-day basis, you want your patients to survive the operation.
DR. MARK DERSHWITZ: Oh, yes.
THEODORE S. SHOUSE: Okay. Okay. Death is not the desired outcome of what you do on a daily basis.
DR. MARK DERSHWITZ: No.
THEODORE S. SHOUSE: Okay. Now, are you an expert in toxicokinetics?
DR. MARK DERSHWITZ: Yes, I am.
THEODORE S. SHOUSE: You are? Okay. Are you an expert in necrokinetics?

19 DR. MARK DERSHWITZ: There's no such word in the dictionary.
20 THEODORE S. SHOUSE: Okay. Well, do you know what that
21 means –
22 (Inaudible/mixed voices)
23 DR. MARK DERSHWITZ: I can invent a definition for that.
24 THEODORE S. SHOUSE: Okay. Do you – um, are you an expert
25 in postmortem redistribution of drugs?
26 DR. MARK DERSHWITZ: Um, I'm quite familiar with the topic.

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1 THEODORE S. SHOUSE: Well, didn't you testify on direct
2 examination that once the person dies that redistribution stops?
3 Is that your position?
4 DR. MARK DERSHWITZ: Well, there's two different definitions
5 of "redistribution."
6 THEODORE S. SHOUSE: Okay.
7 DR. MARK DERSHWITZ: In the one case, redistribution is a
8 process by which the medication is distributed throughout the
9 body to various organs. There is also a process by which – and I
10 believe this is what you're alluding to – that the medication can
11 diffuse from tissue back into the circulation

after death.
12 THEODORE S. SHOUSE: Um-hm.
13 DR. MARK DERSHWITZ: And that process occurs to a small but
14 not significant degree with a drug like thiopental.
15 THEODORE S. SHOUSE: Okay. So, it does occur with
16 thiopental.
17 DR. MARK DERSHWITZ: To a small but not very significant
18 degree.
19 THEODORE S. SHOUSE: Okay. Now, you said you *are* an expert
20 in toxicokinetics?
21 DR. MARK DERSHWITZ: Yes, my Doctorate in Pharmacology is
22 primarily a toxicological research degree.
23 THEODORE S. SHOUSE: Okay. Have you published anything on
24 toxicokinetics?
25 DR. MARK DERSHWITZ: Well, again, that's a word that you or
26 somebody else made up. I've publish substantially on toxicology.

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1 THEODORE S. SHOUSE: Okay. But, but on toxicokinetics, the
2 effect of massive fatal doses of drugs on someone's body, have
3 you published anything on that?
4 DR. MARK DERSHWITZ: Well, that's not the

definition. I've
published extensively on kinetics and I've published extensively
on toxicology, and I've published extensively on what you're
calling "toxicokinetics."
THEODORE S. SHOUSE: Okay. Um, have you ever written
anything about thiopental?
DR. MARK DERSHWITZ: Uh, yes.
THEODORE S. SHOUSE: Okay. What?
DR. MARK DERSHWITZ: Um, I have both book chapters and
review articles on thiopental. The standard anesthesia manual
that is used by almost all of the anesthesiologists in the
country, uh, has a chapter on Intravenous Anesthetics, which
I've authored for several additions.
THEODORE S. SHOUSE: Okay. Have you – are you an expert in
forensic pathology?
DR. MARK DERSHWITZ: No.
THEODORE S. SHOUSE: Okay. An expert in forensic pa – uh,
toxicology?
DR. MARK DERSHWITZ: No, I have a working knowledge of it.
THEODORE S. SHOUSE: Okay. But you're not an expert in
those fields. Now, pharmacokinetics and pharmacodynamics, those
specialties deal with the effects of properties

and the time
26 effects of drugs in living people. Is that fair to say?

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1 DR. MARK DERSHWITZ: Yes.
2 THEODORE S. SHOUSE: Okay. Now, uh, you've submitted
3 affidavits and you've testified on this subject that we're here
4 about today in a number of states. Is that right?
5 DR. MARK DERSHWITZ: Yes.
6 THEODORE S. SHOUSE: Okay. Uh, Ohio?
7 DR. MARK DERSHWITZ: Yes.
8 THEODORE S. SHOUSE: Maryland?
9 DR. MARK DERSHWITZ: Yes.
10 THEODORE S. SHOUSE: South Carolina?
11 DR. MARK DERSHWITZ: Yes.
12 THEODORE S. SHOUSE: Virginia?
13 DR. MARK DERSHWITZ: Yes.
14 THEODORE S. SHOUSE: California?
15 DR. MARK DERSHWITZ: Yes.
16 THEODORE S. SHOUSE: And now Kentucky.
17 DR. MARK DERSHWITZ: Yes.
18 THEODORE S. SHOUSE: Okay. Now, Mr. Middendorf went through
19 several charts with you that were prepared for this litigation.
20 You've prepared similar charts for other states, is that correct?
21 DR. MARK DERSHWITZ: Yes, depending on what dose of

thiopental they use.
THEODORE S. SHOUSE: Okay, right. I mean, it's – it's
state-specific, I mean, that each chart you've prepared has been
state-specific.

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DR. MARK DERSHWITZ: Well, some states that use the same
dose don't require different charts.
THEODORE S. SHOUSE: Okay. Okay. Are you familiar with
something called "anesthesia awareness"?
DR. MARK DERSHWITZ: Do you mean awareness under anesthesia?
THEODORE S. SHOUSE: Right. It's often called
"intraoperative awareness."
DR. MARK DERSHWITZ: Yes, I'm very familiar with that.
THEODORE S. SHOUSE: Okay. Uh, what's the incidence of
anesthesia awareness?
DR. MARK DERSHWITZ: Well, the, uh, to use the proper term,
the incidence of awareness under anesthesia is between 0.2 and
0.5 percent if you take all patients coming for surgery.
THEODORE S. SHOUSE: Okay. And that's about one in 500?
DR. MARK DERSHWITZ: Give or take a little

bit.
16 THEODORE S. SHOUSE: Okay. But that's a ballpark.
17 DR. MARK DERSHWITZ: Approximately.
18 THEODORE S. SHOUSE: Okay. And those are clinical numbers,
19 Right?
20 DR. MARK DERSHWITZ: Yes, based upon real people having real
21 operations.
22 THEODORE S. SHOUSE: Right, real operations by medical
23 doctors.
24 DR. MARK DERSHWITZ: Yes.
25 THEODORE S. SHOUSE: And with medical doctors applying the
26 anesthesia to the patient.

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1 DR. MARK DERSHWITZ: Correct.
2 THEODORE S. SHOUSE: And presumably with surgeons performing
3 the surgery.
4 DR. MARK DERSHWITZ: Yes.
5 THEODORE S. SHOUSE: And these are in hospital settings.
6 DR. MARK DERSHWITZ: Yes.
7 THEODORE S. SHOUSE: Okay. Okay. Um, these aren't where
8 the anesthesia's been administered by an EMT or a phlebotomist
9 from another room, are they?
10 DR. MARK DERSHWITZ: No, but it's also a

dose of
approximately one-tenth the anesthetic that's given for an
execution.
THEODORE S. SHOUSE: Okay. But again, these are medical
doctors administering it.
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. Now, are you familiar with an
organization called the Joint Commission on Accreditation of
Healthcare Organizations?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. And, uh, UMass Memorial Medical
Center is accredited by that organization, isn't it?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. Now, are you familiar with
something the Joint Commission calls a "Sentinel Event Alert"?
DR. MARK DERSHWITZ: Yes.

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THEODORE S. SHOUSE: All right. And are you familiar that
that organization issued a Sentinel Event Alert last October 6th
on the topic of anesthesia awareness?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay, you've seen

that report, right?

DR. MARK DERSHWITZ: Yes.

THEODORE S. SHOUSE: Okay. Now, I'd like to show you that report, if I could. May I approach?

JUDGE ROGER CRITTENDEN: Please.

THEODORE S. SHOUSE: Now, could you read the highlighted portion there on page 1, please?

DR. MARK DERSHWITZ: Yes. It says, "Monitoring patients under general anesthesia to prevent anesthesia awareness can be challenging. Despite a variety of available monitoring methods, awareness is difficult to recognize while it is occurring. Typical indicators of physiologic and motor response, such as high blood pressure, fast heart rate, or movement, or hemodynamic changes are often masked by the use of paralytic agents to achieve necessary muscle relaxation during the procedure, as well as the concurrent administration of other drugs necessary to the patient's management, such as beta blockers or calcium channel blockers."

THEODORE S. SHOUSE: Okay. And just for a second there, this organization, the Joint Commission on Accreditation of

Healthcare Organizations, the same organization that accredits

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the hospital where you work, they use the expression "anesthesia awareness," is that correct?

DR. MARK DERSHWITZ: Yes, but that's not the term that anesthesiologists use. We use the term "awareness under anesthesia."

THEODORE S. SHOUSE: Okay, could you turn to page 2 of that Sentinel Event Alert and read the highlighted sentence please?

DR. MARK DERSHWITZ: It says "Avoid muscle paralysis unless absolutely necessary, and even then, avoid total paralysis by using the only – only the amount clinically required."

THEODORE S. SHOUSE: Okay. Thank you. Now, just jump ahead for a second, pancuronium bromide is a paralytic agent, is that correct?

DR. MARK DERSHWITZ: Yes, it is.

THEODORE S. SHOUSE: And in the doses used in Kentucky's lethal injection protocol, that would cause total paralysis, is that right?

DR. MARK DERSHWITZ: Yes, it will.
THEODORE S. SHOUSE: Okay. Now, would you say that – and I'm just going to keep calling it "anesthesia awareness" because I am not an anesthesiologist, if that's okay. Would you say that anesthesia awareness is a, is a significant problem, it's a real problem?
DR. MARK DERSHWITZ: Yes, we are concerned about it in my specialty.

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THEODORE S. SHOUSE: Okay, okay. What are some ways to monitor for anesthesia awareness? It says in that report that it's difficult to monitor for it.
DR. MARK DERSHWITZ: The usual way that it is monitored is by the experience and skill of the clinician giving the anesthesia. There are numerous machines that could also be employed, and they are becoming more widely employed, but I wouldn't say that they are a standard of care yet.
THEODORE S. SHOUSE: Okay, what is the standard of care now?
DR. MARK DERSHWITZ: The standard of

care is not to use
Them.
THEODORE S. SHOUSE: Okay. Um, what do you do to monitor
for anesthesia awareness at UMass?
DR. MARK DERSHWITZ: We have tested anesthesia monitors in
some but not all of our operations.
THEODORE S. SHOUSE: Okay. If you don't have that, what
would do *you* do?
DR. MARK DERSHWITZ: I monitor the patient.
THEODORE S. SHOUSE: Okay. Tell me how.
DR. MARK DERSHWITZ: I don't understand the question.
THEODORE S. SHOUSE: How do you know that the patient that's
been operated on in a case where you are the anesthesiologist is
in fact in a surgical plane of anesthesia? What do you do?
DR. MARK DERSHWITZ: Well, I monitor their blood pressure
and their heart rate and I look at their eyes and I look at the
surgical field and I look at the amount of anesthesia that's in

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their body. And I put all of these things together to come up
with an assessment.

THEODORE S. SHOUSE: Right, because you're a Board-certified anesthesiologist –

DR. MARK DERSHWITZ: Yeah

THEODORE S. SHOUSE: – with, I believe, over 20 years' experience.

DR. MARK DERSHWITZ: Approximately.

THEODORE S. SHOUSE: Okay. So you take their blood pressure.

DR. MARK DERSHWITZ: Yes.

THEODORE S. SHOUSE: Would the corneal reflex be a way to see if someone is under the effects of anesthesia?

DR. MARK DERSHWITZ: That's one reflex that one could look at.

THEODORE S. SHOUSE: Okay. What are some others you could look at?

DR. MARK DERSHWITZ: Other reflexes?

THEODORE S. SHOUSE: Um-hm [yes].

DR. MARK DERSHWITZ: Uh, you could look at airway reflexes, for example.

THEODORE S. SHOUSE: Okay. Is there – could you squeeze their trapezius muscle?

DR. MARK DERSHWITZ: That would be a silly thing to do under surgery.

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THEODORE S. SHOUSE: Okay. Well, give me some more then.
Okay, so you – so you said that the corneal reflex was one; what
are some others?
DR. MARK DERSHWITZ: Well, airway reflexes to see if there's
any response to intubation of the airway.
THEODORE S. SHOUSE: Okay, is there anything else?
DR. MARK DERSHWITZ: I think that's more than enough.
THEODORE S. SHOUSE: Okay, okay. What about noxious
stimuli? What about subjecting them to something painful, to
see if they're –
DR. MARK DERSHWITZ: Well, the surgeons are doing that.
THEODORE S. SHOUSE: Right, uh-huh [yes]. But I'm talking
About anesthesia awareness if they're paralyzed.
DR. MARK DERSHWITZ: If they're paralyzed but the surgeon
does something noxious, their heart rate and blood pressure
will go up.
THEODORE S. SHOUSE: Okay, heart rate and blood pressure
will go up. Okay, now, um, if they weren't

paralyzed – if an
19 inmate weren't paralyzed by the pancuronium bromide, you'd know
20 if they were under the effects of the anesthesia, right?
21 DR. MARK DERSHWITZ: I don't understand the question.
22 THEODORE S. SHOUSE: Well, potassium chloride, that hurts
23 When it's injected in this amount, is that correct?
24 DR. MARK DERSHWITZ: Yes, it does, a lot.

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1 THEODORE S. SHOUSE: It hurts a lot. So if you injected
2 that into me standing here now, everybody in this room would
3 probably know it because I would be screaming, I take it?
4 DR. MARK DERSHWITZ: Correct.
5 THEODORE S. SHOUSE: Okay, so if we didn't use the Pavulon,
6 all right, and the sodium thiopental weren't working, we'd know
7 that as soon as the potassium chloride was injected, is that
8 correct?
9 DR. MARK DERSHWITZ: Yes, you'd also know that the
10 thiopental weren't working well before you started the injections
11 of anything else.

THEODORE S. SHOUSE: Okay, how?
DR. MARK DERSHWITZ: Well, there's a couple of different ways, but first of all, let us assume that the IV were not in a vein –
THEODORE S. SHOUSE: Okay.
DR. MARK DERSHWITZ: – which is one theoretic way for the thiopental not to work. Because thiopental is a solution of pH 10, ordinarily, you expect when the medication goes in intravenously that the person will lose consciousness in less than a minute, and the thiopental is a painless injection. If the thiopental were to go into any tissue site other than a vein, the inmate would not lose consciousness, and they would be in extreme pain; they would scream out.
THEODORE S. SHOUSE: Um-hm [yes]. Okay. So is it your testimony that there are ways to see if the anesthesia is taking

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place? Corneal reflex, let's just stick with that. You could use a corneal reflex to see if they were under the effect of anesthesia, is that correct?

DR. MARK DERSHWITZ: Well, that's one way, but that's not the typical way.

THEODORE S. SHOUSE: Okay, I think you also testified on direct examination that, quote, "the old-fashioned way of taking blood pressure," using a stethoscope might work, is that correct?

DR. MARK DERSHWITZ: Well, you can take a blood pressure with a stethoscope, and it's more likely to be able to determine a blood pressure when a blood pressure is substantially below normal.

THEODORE S. SHOUSE: Substantially below normal.

DR. MARK DERSHWITZ: When a automated blood pressure machine is likely to fail.

THEODORE S. SHOUSE: Okay, so an automated machine might not work, but the old-fashioned way might?

DR. MARK DERSHWITZ: To measure a blood pressure that's very low, yes.

THEODORE S. SHOUSE: Okay, great, thank you. So – okay, if the sodium thiopental has been injected but the pancuronium bromide hasn't, all right, so we're at the state where the inmate has been anesthetized.

24 DR. MARK DERSHWITZ: Yes.

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1 THEODORE S. SHOUSE: Okay? Now there are different
2 planes of anesthesia, is that correct? Difference planes of
3 consciousness?
4 DR. MARK DERSHWITZ: "Plane" is an archaic use that only
5 applies to ether.
6 THEODORE S. SHOUSE: Okay. Are there different levels of,
7 of unconsciousness?
8 DR. MARK DERSHWITZ: Uh, that's not a term that a
9 neurophysiologist would use, but I, I can say that there could
10 be different degrees of consciousness and unconsciousness.
11 THEODORE S. SHOUSE: Okay, well, I'm not a
12 neurophysiologist, obviously. Um, well, let me ask you this.
13 You talked about some of the studies that were done to produce
14 your graphs and things?
15 DR. MARK DERSHWITZ: Yes.
16 THEODORE S. SHOUSE: And you said that those were based on
17 giving commands to the patient?
18 DR. MARK DERSHWITZ: Yes, the, the accepted definition of

consciousness or awareness in research in my specialty is the ability of the person being studied to follow a simple command like "raise your right arm" or "raise your left leg." So a person is given a particular medication at a particular dose, and they are then asked, "raise your right arm, "raise your left leg." etc. If they follow the command, if they execute the command correctly, they are deemed to be awake and conscious, and if they do not, then they are deemed to be unconscious. And

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these are people who are motivated to, uh, you know, to do the study.

THEODORE S. SHOUSE: Right, exactly. Um, but you would agree that there's a different level of stimulation, telling someone to raise their right leg and injecting them with potassium chloride?

DR. MARK DERSHWITZ: Yes, subjecting them to potassium chloride is painful, similar to a surgical stimulus.

THEODORE S. SHOUSE: So you might sleep

through "raise your
right leg, sir," but you might not sleep through something far
more stimulating, is that fair to say?
DR. MARK DERSHWITZ: Uh, possibly yes and possibly no.
There – there's not a very close correlation between hypnosis and
analgesia, and I'm using the term "hypnosis" as a pharmacologist,
which means unconsciousness.
THEODORE S. SHOUSE: Okay, okay. Well, now raises something
else. You said you, you had written on, um, short-acting
hypnotics, but you've never written anything on short-acting
barbiturates, have you?
DR. MARK DERSHWITZ: Yeah, I told you that I have, uh,
several book chapters on intravenous anesthetics I have, uh, I
have authored.
THEODORE S. SHOUSE: Okay. Just a second, please. Do you
remember testifying in a case in Virginia on August the 30th of
last year, a case of *James Edward Reid versus Gene M. Johnson*?
DR. MARK DERSHWITZ: Yes.

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THEODORE S. SHOUSE: Okay, just one

second. (Inaudible) May
I approach the witness, Judge? Thank you. Now, what's the title
of that document I just handed you?
DR. MARK DERSHWITZ: It says, "Complete transcript of the
hearing before the Honorable Henry E. Hudson, United States
District Court Judge."
THEODORE S. SHOUSE: Okay. And if you could just turn to
page 2 for just a second.
JUDGE ROGER CRITTENDEN: Page 2 or –
THEODORE S. SHOUSE: Page 2.
JUDGE ROGER CRITTENDEN: Oh, okay, okay, it starts at
(inaudible).
THEODORE S. SHOUSE: Right, but the index page there, do you
see that?
JUDGE ROGER CRITTENDEN: Okay.
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. And that says you were the
witness, right?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: I mean, you're just – it's just Q
and A from here on. I just want to make sure this was you
testifying. Can you go to page 6 please?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Line 13. "Question: Have you

25 researched and published any articles on short-acting
26 barbiturates?" What was your answer?

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1 DR. MARK DERSHWITZ: My answer was: "Not short-acting
2 barbiturates but a closely related series of medications that
3 are used to induce anesthesia." That's a different question
4 that you've asked me because the word "research" was in there.
5 THEODORE S. SHOUSE: Um-hm.
6 DR. MARK DERSHWITZ: I have not personally done research on
7 thiopental, but I've still published extensively on it based on
8 others' research.
9 THEODORE S. SHOUSE: Okay, okay. So that one word makes
10 your answer different?
11 DR. MARK DERSHWITZ: Yes.
12 THEODORE S. SHOUSE: Okay. Just one second, please. Just
13 hang on to that document. You're familiar with the story of a
14 woman named Carol Weihrer, right?
15 DR. MARK DERSHWITZ: Yes, I've heard about her unfortunate
16 experience under anesthesia.
17 THEODORE S. SHOUSE: Okay. And I believe you said in that

same hearing there in Virginia that her experience was, quote, "awful"?

DR. MARK DERSHWITZ: Yes. Any time the patient is completely aware under anesthesia, I agree it's awful.

THEODORE S. SHOUSE: Okay. Now, um, let's go back and talk about some of the drugs that are used in Kentucky's lethal injection protocol.

DR. MARK DERSHWITZ: Okay.

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THEODORE S. SHOUSE: Now, what purpose did you say the sodium thiopental served, again?

DR. MARK DERSHWITZ: Sodium thiopental renders the inmate unconscious.

THEODORE S. SHOUSE: Okay. How does that work on the brain?

DR. MARK DERSHWITZ: Nobody knows.

THEODORE S. SHOUSE: Okay. We don't understand how that works?

DR. MARK DERSHWITZ: We know a little bit about the fact that thiopental primarily interacts with the neurotransmitter system called GABA, which stands for gamma amino butyric acid.

But at the specific molecular level, it's not understood how any general anesthetics work.

THEODORE S. SHOUSE: Okay. Good. Now, um, in your expert opinion, how much of the sodium thiopental would have circulated through an inmate's body after three minutes under the Kentucky protocol?

DR. MARK DERSHWITZ: I think it's very difficult to predict because the variability from person to person in terms of a three-gram dose on their cardiac output is going to be very substantial.

THEODORE S. SHOUSE: Right. So –

DR. MARK DERSHWITZ: So not very much will get circulated.

THEODORE S. SHOUSE: Okay. Now, it's your position that a person with a true and accurate reading of seven – and we're going to just assume that it's a true and accurate reading, okay?

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– of seven milligrams per liter of thiopental in their blood, they'd have a 50 percent probability of being conscious and a 50 percent probability of being unconscious. Is

that your
position?
DR. MARK DERSHWITZ: If the blood was obtained from an
artery.
THEODORE S. SHOUSE: Right, I'm, I'm saying – I'm assuming
These are true and accurate numbers.
DR. MARK DERSHWITZ: But in addition, it has to be a true
and accurate number but also obtained from an artery.
THEODORE S. SHOUSE: Okay, okay. What if you took it from
the brain?
DR. MARK DERSHWITZ: Well, the, the analytical technique has
not been validated for actually measuring brain concentrations on
the medication. And so arterial sampling is used as a surrogate
for brain concentrations and that has been validated for all
classes of anesthetic drugs.
THEODORE S. SHOUSE: Okay, so if you had a true and accurate
arterial reading, it would be – and it was seven milligrams per
liter, that would be a 50-50 change of consciousness?
DR. MARK DERSHWITZ: Correct.
THEODORE S. SHOUSE: Okay. Now, what function did you say
the Pavulon served?

24 DR. MARK DERSHWITZ: The pancuronium –
25 THEODORE S. SHOUSE: I'm sorry, pancuronium bromide?

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1 DR. MARK DERSHWITZ: – is going to decrease the ability of
2 potassium chloride given subsequently to cause involuntary muscle
3 movement.
4 THEODORE S. SHOUSE: Okay, but those are the involuntary
5 muscle movements.
6 DR. MARK DERSHWITZ: Correct.
7 THEODORE S. SHOUSE: And you testified that if the
8 anesthesia – *if* the anesthesia has been given properly, if the
9 sodium thiopental has been given properly, then those – is
10 "spasm" a fair word to use?
11 DR. MARK DERSHWITZ: It is actually not a spasm. It is a
12 muscle contraction.
13 THEODORE S. SHOUSE: Okay. But that muscle contraction
14 would be unconscious.
15 DR. MARK DERSHWITZ: It would not be perceptible to the
16 inmate.
17 THEODORE S. SHOUSE: Okay, okay. Now, the pancuronium
18 bromide, that's a, uh, neuromuscular blocking

agent. Is that
19 correct?
20 DR. MARK DERSHWITZ: That's correct.
21 THEODORE S. SHOUSE: Okay. Now, is it necessary under
22 Kentucky's protocol or under any protocol to ensure a humane
23 death that the inmate may be paralyzed? Is that a requirement?
24 DR. MARK DERSHWITZ: That's not a medical decision.
25 That's a sociological decision.

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1 THEODORE S. SHOUSE: Okay, okay. But as, but as you've said
2 here today and in another testimony that it would mask maybe an
3 unpleasant sight from the witnesses.
4 DR. MARK DERSHWITZ: Correct.
5 THEODORE S. SHOUSE: Okay, okay. Now, you testified to this
6 on direct; I just want to make sure. You said that, um, okay,
7 our protocol, as you know, calls for one drug to be injected and
8 a saline flush and then another drug, and a saline flush and then
9 another drug.
10 DR. MARK DERSHWITZ: Yes.
11 THEODORE S. SHOUSE: Okay. Now, what would happen if the
12 sodium thiopental and the pancuronium

bromide came in contact
with one another?
DR. MARK DERSHWITZ: The pancuronium bromide would
precipitate.
THEODORE S. SHOUSE: Okay. May I approach the witness,
Judge? Okay. Do you comply with this, Doctor?
DR. MARK DERSHWITZ: "Technical Report: The Effect of
Pancuronium on the Solubility of Aqueous Thiopentone."
THEODORE S. SHOUSE: Okay. Could you turn to them the last
page? And do you see a highlighted portion there?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Could you read that, please?
DR. MARK DERSHWITZ: It says here, "In summary, insoluble
thiopentone is the precipitate formed when aqueous thiopentone
is mixed with pancuronium. The principal clinical risk of

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inadvertently mixing thiopentone and pancuronium is the resultant
loss of intravenous access."
THEODORE S. SHOUSE: Okay. Let me ask you a question.

Doesn't that say the exact opposite of what you just said?
DR. MARK DERSHWITZ: It does. May I have a minute to review
the paper to see why?
THEODORE S. SHOUSE: Certainly, certainly. Certainly.
DR. MARK DERSHWITZ: Let's see what they did here. (Pause
while reading) The preparation that they are using here I do not
believe is the preparation we use in the United States. It says
under "Methods": "A commercial preparation of sodium thiopental
with sodium carbonate."
THEODORE S. SHOUSE: Um-hm.
DR. MARK DERSHWITZ: That's a buffering agent. I don't
believe we use that in this country.
THEODORE S. SHOUSE: And you think that makes the difference
here?
DR. MARK DERSHWITZ: I believe it does, because what we're –
what you're dealing with here is a very simple pH titration of an
acid versus a base, and if you've added a previous buffering
agent that can distort the, uh, the results. I can tell you,
having shown this to residents many times, that if you mix
thiopental and, um, pancuronium or other

drugs that are low pH
24 together, you get a precipitate and, uh, the precipitate is, uh,
25 is the, uh, is the hydrochloride salt with which it's mixed.

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1 THEODORE S. SHOUSE: Okay, understand. But this says the
2 Exact opposite of your testimony. Is that correct?
3 DR. MARK DERSHWITZ: But they are using a medication that's
4 different than what I'm using.
5 THEODORE S. SHOUSE: Okay, okay. Thank you. Could a
6 precipitate pancuronium bromide and sodium thiopental clog an
7 IV line?
8 DR. MARK DERSHWITZ: Absolutely.
9 THEODORE S. SHOUSE: Okay. Now, this is – Judge, this is
10 a, a small subset of what's been introduced as Plaintiff's
11 Exhibit 1. May I approach?
12 JUDGE ROGER CRITTENDEN: Yes.
13 THEODORE S. SHOUSE: Just for clarification –
14 JUDGE ROGER CRITTENDEN: That last question you asked, could
15 it precipitate of sodium thiopental and pancuronium bromide clog
16 an IV line.

THEODORE S. SHOUSE: Yes, sir.
JUDGE ROGER CRITTENDEN: And the answer was yes. And that's the line, I take it, coming from the syringe.
THEODORE S. SHOUSE: Yes, sir.
JUDGE ROGER CRITTENDEN: If they mix together, it could Block the line.
DR. MARK DERSHWITZ: Yes, sir.
JUDGE ROGER CRITTENDEN: But the potassium chloride would not go through. Is that what you think would happen?

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DR. MARK DERSHWITZ: Actually, if a precipitate formed after the thiopental were given and the pancuronium mixed with it, it would actually block the pancuronium from even getting to the – to the inmate's circulation, which is why after the thiopental was given, the line was flushed with saline to prevent the ability of the different medications to mix inside the IV line. No precipitate forms when the medication is mixed inside the body.
JUDGE ROGER CRITTENDEN: Oh, it is only inside the line.
DR. MARK DERSHWITZ: It is only inside the

IV line.
JUDGE ROGER CRITTENDEN: Okay.
THEODORE S. SHOUSE: And they flush – they use the saline
flush to prevent that?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. Could you, first of all, what's
the document I've just handed you?
DR. MARK DERSHWITZ: It says, "The Execution Lethal
Injection."
THEODORE S. SHOUSE: Okay. Could you flip to page 4 of that
please? Do you see item 16?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. Could you read that please?
It's continued on the next page.
DR. MARK DERSHWITZ: "Upon the Warden's order to proceed and
the microphone turned off, a designated team member will begin a
rapid flow of lethal chemicals in the following order. Sodium

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thiopental, three grams. Note: If it appears to the Warden that
the condemned is not unconscious within 60 seconds to his command
to proceed, the Warden shall stop the flow of sodium thiopental

in the primary site and order that the backup IV be used with a new flow of sodium thiopental."

THEODORE S. SHOUSE: Number 2?

DR. MARK DERSHWITZ: Number 2, saline 25 milligrams.

THEODORE S. SHOUSE: And that's the flush?

DR. MARK DERSHWITZ: That's the flush.

THEODORE S. SHOUSE: Is it your testimony that 25 milligrams of saline is enough to flush the line?

DR. MARK DERSHWITZ: That's a typographical error. It should be 25 milliliters.

THEODORE S. SHOUSE: Okay. 25 milligrams, as printed here, is not enough to flush that line?

DR. MARK DERSHWITZ: Correct.

THEODORE S. SHOUSE: Is it fair to say that – is it fair to say that 25 milligrams is about a quarter of a drop of water?

DR. MARK DERSHWITZ: Uh, 25 milligrams is much less than a teaspoon.

THEODORE S. SHOUSE: Okay. Thank you. Now, let's talk about your charts that you prepared for this case. Now you prepared about five charts, I believe. Right?

DR. MARK DERSHWITZ: Yes.

THEODORE S. SHOUSE: Okay, but these two are the two that

26 have been – and do you have those there?

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1 DR. MARK DERSHWITZ: Yes.
2 THEODORE S. SHOUSE: Okay. And those are Commonwealth 6 and
3 – or Defendants' 6 and 7. Now, all of these charts and all the
4 charts you prepared that weren't introduced into evidence, those
5 were based on – well, I guess originally probably 2 grams. Did
6 you prepare some, some charts based on two grams of sodium
7 thiopental?
8 DR. MARK DERSHWITZ: Yes. To my recollection, I've done
9 this calculation from 1.5 to 3.5 grams, depending on the state,
10 and what their protocol is.
11 (Break)
12 JUDGE ROGER CRITTENDEN: Thank you, Dr. Dershwitz.
13 Mr. Shouse, go ahead.
14 THEODORE S. SHOUSE: Yes, just before I recommence, just as
15 a matter of housekeeping, this technical report, "The Effect of
16 Pancuronium on the Solubility of Aqueous Thiopentone" –
17 JUDGE ROGER CRITTENDEN: Yes, sir.
18 THEODORE S. SHOUSE: – I'd like to move –
19 (Inaudible/mixed and muffled voices)

THEODORE S. SHOUSE: (inaudible) admitted as Plaintiffs' Exhibit 24.
JUDGE ROGER CRITTENDEN: All right. Okay.
THEODORE S. SHOUSE: Thank you. And then, um, again, just out of an abundance of caution, and I know we've had a lot of exhibits introduced, I don't want to – I don't want to needlessly introduce new things, but this package insert that was supplied

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by the Defendant, I'm not entirely sure if that page has been, uh, marked individually as an exhibit. It might be included in another one, but I'm not sure.
JUDGE ROGER CRITTENDEN: I've seen it, but I don't know whether it's been included on anything. But if you want to mark it, go ahead.
THEODORE S. SHOUSE: And have it admitted as Plaintiffs' 25.
MALE VOICE: No objection.
JUDGE ROGER CRITTENDEN: All right, so.
THEODORE S. SHOUSE: Thank you. Okay, Doctor. Now, again, these charts, the two that have been introduced into evidence,

These are based upon three grams of sodium thiopental actually
getting into the inmate.
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay, okay. Now, does the
concentration of the solution of thiopental matter?
DR. MARK DERSHWITZ: In terms of what?
THEODORE S. SHOUSE: Well, I mean, can you – can you
over-dilute sodium thiopental?
DR. MARK DERSHWITZ: Um, I'm – I don't think I understand
the question.
THEODORE S. SHOUSE: What's the therapeutic concentration of
sodium thiopental?
DR. MARK DERSHWITZ: 25 milligrams per milliliter.
THEODORE S. SHOUSE: Okay. Okay, so 25 milligrams per
liter. I mean, 2.5 milligrams per liter.

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DR. MARK DERSHWITZ: No.
THEODORE S. SHOUSE: No?
DR. MARK DERSHWITZ: 25 milligrams per liter for a
2.5 percent solution –
THEODORE S. SHOUSE: There you go. I got confused.
DR. MARK DERSHWITZ: – is the standard

therapeutic
concentration.
THEODORE S. SHOUSE: 2.5, okay, there you go. Um, now,
you've got the, uh, the lethal injection protocol there, the
small part of it.
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Well, so, so, that – your charts are
Based on that concentration.
DR. MARK DERSHWITZ: No. They are based upon the dose of
Three grams.
THEODORE S. SHOUSE: Okay. Concentration doesn't matter?
DR. MARK DERSHWITZ: Concentration doesn't matter within
reasonable ranges.
THEODORE S. SHOUSE: Okay.
DR. MARK DERSHWITZ: In other words, if you increase the
concentration from 2.5 percent to 5 percent, the drug works the
same, but it hurts on injection.
THEODORE S. SHOUSE: Okay.
DR. MARK DERSHWITZ: So, 2.5 percent is chosen because it's
painless on injection.
THEODORE S. SHOUSE: Okay.

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DR. MARK DERSHWITZ: If you diluted it

more, it still works
and it would just require a larger volume and take longer to
inject.
THEODORE S. SHOUSE: Okay. Can you take a look through
there and tell me where it says that the concentration of the
sodium thiopental is for lethal injection in Kentucky?
DR. MARK DERSHWITZ: I don't see it listed.
THEODORE S. SHOUSE: Okay, thank you. How does the sodium
thiopental come from the manufacturer?
DR. MARK DERSHWITZ: As a solid.
THEODORE S. SHOUSE: Okay. What do you do to mix it up?
DR. MARK DERSHWITZ: You mix it with a dilument.
THEODORE S. SHOUSE: With what, I'm sorry?
DR. MARK DERSHWITZ: Dilument.
THEODORE S. SHOUSE: Okay. And what is that in this case?
DR. MARK DERSHWITZ: Uh, it depends on the manufacturer.
Usually, it's sterile preservative-free water.
THEODORE S. SHOUSE: Okay. Do, um, is it hard to mix up?
DR. MARK DERSHWITZ: No.
THEODORE S. SHOUSE: Okay. Judge, may I approach?
JUDGE ROGER CRITTENDEN: Please.
THEODORE S. SHOUSE: What does that look

to you, Doctor?
DR. MARK DERSHWITZ: It looks like the package insert for
one gram of thiopental.
THEODORE S. SHOUSE: Okay. Could you turn to page 2? Could
you please read the highlighted portion?

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DR. MARK DERSHWITZ: It says, "This drug should be
administered only by persons qualified in the use of intravenous
anesthetics."
THEODORE S. SHOUSE: Okay. Thank you. Judge, if I could
Mark that and have that entered as Plaintiffs' 26.
JUDGE ROGER CRITTENDEN: All right. Any objection?
MALE VOICE: No objection.
JUDGE ROGER CRITTENDEN: So ordered.
THEODORE S. SHOUSE: All right. Now the pancuronium bromide
paralyzes the inmate. Is that correct?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. If you just injected the amounts
– the dose of pancuronium bromide specified in the Kentucky protocol,
would that cause the inmate to suffocate?
DR. MARK DERSHWITZ: "Suffocate" is the wrong word, but it

was cause them to become apneic, which means unable to breathe.
THEODORE S. SHOUSE: Okay.
DR. MARK DERSHWITZ: And they would ultimately die of hypoxemia.
THEODORE S. SHOUSE: Okay, an inability to breathe?
DR. MARK DERSHWITZ: Yes, amongst other – it's inability to move any muscle.
THEODORE S. SHOUSE: Okay. But that's, that's suffocation, right?

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DR. MARK DERSHWITZ: Uh, suffocation is generally a mechanical obstruction to the airway. This is a paralysis of all skeletal muscles including the muscles of ventilation.
THEODORE S. SHOUSE: Okay.
DR. MARK DERSHWITZ: So they'd be completely unable to breathe as well as unable to move any other skeletal muscle in their body.
THEODORE S. SHOUSE: Would that be a painful way to die?
DR. MARK DERSHWITZ: I'm not sure "pain" is the right word, but it would be extremely unpleasant.

THEODORE S. SHOUSE: Okay. Scary?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Agonizing?
DR. MARK DERSHWITZ: I would think that that's the case, yes.
THEODORE S. SHOUSE: Okay. Now, potassium chloride, that would burn if it were injected into a conscious person, is that correct?
DR. MARK DERSHWITZ: At this concentration, yes.
THEODORE S. SHOUSE: Yes, okay. When I'm talking about these drugs, I'm obviously talking about them in terms of the dosages used in the Kentucky lethal injection protocol.
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. It would burn a lot?
DR. MARK DERSHWITZ: Yes.

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THEODORE S. SHOUSE: And we've already talked about how –
and I don't want to misuse the word: I was saying "spasm" but –
involuntary muscle contractions would occur?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: And that might not be pleasant to look

at?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: And the Pavulon masks those spasms?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. Are there other drugs that would stop the heart without contractions?
DR. MARK DERSHWITZ: Uh, there are lots of drugs that when given in overdose could stop the heart. Um, I can't think of anything off the top of my head that would work as rapidly as potassium.
THEODORE S. SHOUSE: Okay. How about Digoxin?
DR. MARK DERSHWITZ: Digoxin would work extremely slowly to stop the heart.
THEODORE S. SHOUSE: Okay. But would there be attendant convulsions with that drug? And again, I'm – convulsions, contractions – would there be attendant contractions with that drug?
DR. MARK DERSHWITZ: No, but an overdose of Digoxin would take minutes to hours to bring the heart to a stop.
THEODORE S. SHOUSE: Okay. How about Dilantin?

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DR. MARK DERSHWITZ: Dilantin would stop the heart within a few minutes.
THEODORE S. SHOUSE: Okay.
DR. MARK DERSHWITZ: Not as fast as potassium, but it would stop the heart within a matter of minutes.
THEODORE S. SHOUSE: Would there be attendant muscle contractions with Dilantin?
DR. MARK DERSHWITZ: No.

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THEODORE S. SHOUSE: Okay. What level of thiopental in the blood needs to be maintained, uh, to conduct a surgical procedure?

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DR. MARK DERSHWITZ: Uh, it depends on what else is being given and it's very rare to rely solely on thiopental as the sole medication for an op- – surgical operation.
THEODORE S. SHOUSE: Okay.
DR. MARK DERSHWITZ: And so typically what we would do, if we were doing what's called "balanced

anesthesia," we would give
one medication to cause the person to be asleep, a different
medication to relieve pain, a different medication for muscle
relaxation. And that is what we call balanced anesthesia.
THEODORE S. SHOUSE: Okay.
DR. MARK DERSHWITZ: And if we were using thiopental to
cause unconsciousness, uh, we would aim for a concentration
somewhere in the, you know, 10 to 12 range, which is a very
high probability of unconsciousness.
THEODORE S. SHOUSE: 10 to 12 what?
DR. MARK DERSHWITZ: Milligrams per liter.
THEODORE S. SHOUSE: Ten to 12 milligrams per liter to
conduct anes- – to conduct surgery?
DR. MARK DERSHWITZ: Yes.
THEODORE S. SHOUSE: Okay. Are you familiar with a book
called "Disposition of Toxic Drugs and Chemicals in Man," by
Randall Baselt?
DR. MARK DERSHWITZ: No, I'm not.
THEODORE S. SHOUSE: You are not familiar with that?
DR. MARK DERSHWITZ: No.

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JEFF MIDDENDORF: Just a few follow-up.

Your Honor. This
6 term of "conscious awareness" continues to pop back up, um, and
7 you said it is – it happens in hospitals but very rare. Is that
8 a fair statement?
9 DR. MARK DERSHWITZ: Our best guess, if you take all
10 patients presenting for anesthesia, it's someplace in the
11 vicinity of 1 in 200 to 1 in 500 will be aware under anesthesia
12 when that was not the goal.
13 JEFF MIDDENDORF: In your experience, have you ever heard of
14 a case of "conscious awareness," or whatever you want to call it,
15 when somebody was given a three-gram dose to induce a coma?
16 DR. MARK DERSHWITZ: No.
17 JEFF MIDDENDORF: So is it fair to say that this would
18 always happen when you're trying to keep somebody very light
19 under anesthesia, the only time it would happen and that's rare?
20 DR. MARK DERSHWITZ: Yes, almost all of the time when we
21 administer an anesthetic to a patient, our goal usually is to
22 have the patient wake up at the end of the operation. Once in
23 awhile, we deliberately keep patients asleep because of the

severity of their illness, and sometimes when we give very large doses of a drug like thiopental, the patient remains asleep even though we would like them to wake up.

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And so, for instance, in the case of intracranial surgery or, let's say, an aneurysm slipping, where I might give three grams of thiopental for brain protection, it would be important for the neurosurgeon and myself to have the patient awake as soon as possible to perform a good neurological exam on the patient to make sure that there were no untoward effects of the surgery. But after three grams of thiopental, we are unable to do so at the end of the operation because typically the patient sleeps for hours afterward.

JEFF MIDDENDORF: So you can say to a medical degree of reasonable certainty that if given a three-gram dose to induce a coma, conscious awareness would never be a problem?

DR. MARK DERSHWITZ: No. If three grams of thiopental were given intravenously, a person is going to sleep

for hours.
JEFF MIDDENDORF: Is 25 milliliters enough of a saline flush to flush a line?
DR. MARK DERSHWITZ: Yes.
JEFF MIDDENDORF: What's the difference between 25 cc's and 25 milliliters?
DR. MARK DERSHWITZ: The difference is only meaningful to a physicist. The two terms are exactly the same at four degrees centigrade, but a milliliter and a cubic centimeter are very, very, slightly different at temperatures other than four degrees centigrade.

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JEFF MIDDENDORF: So if I had a syringe that was labeled "25 cc's of saline," would that be more than enough to flush a line?
DR. MARK DERSHWITZ: Yes.
JEFF MIDDENDORF: I believe you were asked about the drugs that Kentucky uses a little bit. It seems like we've been talking about those quite a bit. And, Your Honor, I don't recall what exhibit this is, where the – where the drugs were

introduced. Um, but those are the bottles that are used in
Kentucky, 500 milligrams?
DR. MARK DERSHWITZ: Yes.
JEFF MIDDENDORF: Would it be fair to say that you need six
of those to obtain 3,000 milligrams?
DR. MARK DERSHWITZ: Yes.
JEFF MIDDENDORF: Is that that difficult to calculate?
DR. MARK DERSHWITZ: I don't think so.
JEFF MIDDENDORF: Okay. Go to pancuronium bromide, if we
use 5 – 50 milligrams in Kentucky, and each one of those are
10-milligram bottles, the only thing we would have to do is use
five of those bottles?
DR. MARK DERSHWITZ: That's correct.
JEFF MIDDENDORF: Is that fairly easy to calculate?
DR. MARK DERSHWITZ: I believe so.
JEFF MIDDENDORF: Potassium chloride: If we use 240
milliequivalents and each bottle is 60 milliequivalents, would
the only thing we need to do is get four of those bottles?

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DR. MARK DERSHWITZ: Yes.

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JEFF MIDDENDORF: All right. Let's talk

about some of the
14 graphs that Mr. Shouse showed you; I believe Exhibit 30 was the
15 one in Kentucky, that you prepared for Kentucky, which was a
16 three-gram dose? Do you have a copy of that? There was
17 testimony from Dr. Heath that said Eddie Lee Harper died in five
18 minutes. What's the probability of consciousness, if somebody
19 had died in five minutes, under your graph, and you've given a
20 3,000-gram dose of sodium –
21 THEODORE S. SHOUSE: Objection. Mr. Harper didn't receive a
22 Three-gram dose.
23 JEFF MIDDENDORF: I'm sorry, two.
24 THEODORE S. SHOUSE: But that chart, there's a three-gram
25 dose.

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1 JEFF MIDDENDORF: Let's, let's assume – let's assume that
2 Mr. Harper received a three-gram dose. There was testimony that
3 he died – Edward Harper died in five minutes. Under this
4 chart, if given a three-gram dose, what's the probability of
5 consciousness, for any individual?
6 DR. MARK DERSHWITZ: After a three-gram

dose, five minutes
later, the probability of consciousness is approximately
0.0000024 percent. And after a two-gram dose, it's approximately
0.00006 percent.
JEFF MIDDENDORF: Let's go to an hour. On the – under the
Kentucky chart that you prepared, three-gram dose, after one
hour, your average man, what is the probability of consciousness,
if given a three-gram dose of sodium thiopental?
DR. MARK DERSHWITZ: It's approximately 0.029 percent.
JEFF MIDDENDORF: Okay, what about two-gram dose, and
whether it was South Carolina or in Ohio?
DR. MARK DERSHWITZ: It's approximately 0.7 percent.
JEFF MIDDENDORF: That's all the questions I have.

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John Rees

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LUKE MORGAN: Okay. In your capacity as Commissioner, uh,
did you meet with members of the Department of Public Advocacy,
as well as other attorneys for the, for Department of Corrections
some time in the Summer or Fall of 2004?
JOHN REES: I did.

LUKE MORGAN: Uh, was this before the present lawsuit was filed?

JOHN REES: Uh, yes, it was.

LUKE MORGAN: About when does that meeting?

JOHN REES: It was August – July-August, some time in that frame. I think the lawsuit was filed in August, as I recall.

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LUKE MORGAN: Okay. Where was it?

JOHN REES: The meeting?

LUKE MORGAN: Yes.

JOHN REES: The meeting was in the conference room of, uh, uh, the Governor's (inaudible).

LUKE MORGAN: Who was at that meeting, sir?

JOHN REES: Mr. {Roach} was there. Mr. Middendorf, myself, uh, I think two, at least two of the individuals at, uh, at the table. I'm not sure who else was there. Uh, yes, I think there was another attorney who worked with Mr. Roach, but I don't – I'm not sure about that.

LUKE MORGAN: What was your purpose in this meeting?

JUDGE ROGER CRITTENDEN: Are we talking settlement here?

LUKE MORGAN: No, sir.
JUDGE ROGER CRITTENDEN: Okay, go ahead.
JEFF MIDDENDORF: Your Honor, if I may, Your Honor, the reason I am calling – that this witness is being called is because – and either his and other witnesses questioned, it has been brought up as to why – the, the fact that the protocol was changed and this witness is here to testify to why.
JUDGE ROGER CRITTENDEN: Okay, you can testify as to why it was changed. Go ahead.
LUKE MORGAN: Okay, what was your purpose in that meeting sir?

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JOHN REES: Uh, there as a representative of the Department of Corrections who has responsibility of, uh, of, uh, carrying out the – an Execution Warrant.
LUKE MORGAN: Okay, what did you say in that meeting?
JOHN REES: Uh, mostly, I observed and listened to the discussions, uh, that, uh, went on among the other attorneys. One thing I do remember asking at some point

during the meeting
was, uh, if there are problems with protocol, and it was apparent
that there were problems with – from the Department of Public
Advocacy's perspective –
THEODORE S. SHOUSE: Objection to that characterization of
the Department. Judge, we are individual attorneys.
JUDGE ROGER CRITTENDEN: All right, I'll, I'll, I'll sustain
the objection, but he can go on.
JOHN REES: Well, it was obvious that various attorneys,
several of the attorneys, uh, uh had difficulties with the
Department's protocol, and I –
MALE VOICE: So, just so we're clear whose Department's
protocol, the Corrections Department –
JOHN REES: Corrections protocol, yes. And I asked those
attorneys, uh, uh, did they had recommendations or suggestions on
how to improve it.
LUKE MORGAN: Well, what were you told?
JOHN REES: They refused to say anything in that regard.
LUKE MORGAN: Well, what decisions were made at that
meeting, sir?

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JOHN REES: No decisions were made at that meeting.
LUKE MORGAN: Well, what actions did you take after that
meeting and later on regarding the lethal injection protocol?
JOHN REES: After that meeting, we had some discussions
between Mr. Middendorf and subsequently Mr. Haeberlin and others.
Uh, Uh, after the lawsuit was filed and as we were moving
forward, we, we did increase the amount of sodium pentothal. Uh,
we, uh, um, uh, brought a crash cart, uh, uh, and, uh, did some
other, uh, uh, changes in the protocol from a technical
perspective, uh, uh, merely addressing areas that we thought
were, uh, were concerns of the Department of Public Advocacy's
attorneys.
LUKE MORGAN: Why did you make these changes, sir?
JOHN REES: Well, the protocol was being challenged. If
we could improve the protocol, uh, to resolve, uh, uh, any
questions, uh, why not do it.
LUKE MORGAN: Okay, what medical

information did you have,
18 uh, in making the decision to increase the sodium thiopental
19 level from two grams to three grams?
20 JOHN REES: Uh, I've been in Corrections 30 years, so I've,
21 I've supervised and managed medical services. . I'm generally
22 familiar with those types of issues. I had discussions with
23 Mr. Haeberlin, uh, and, uh, Mr. Middendorf concerning it. We,
24 uh, uh, reviewed literature regarding the medications. We, uh,
25 uh, Mr. Middendorf shared some information that he had in
26 discussions with Dr. Haas, uh, generally about it. We were

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1 concerned, we wanted to make sure we increased the, uh, uh,
2 dosage that it could be safely and effectively done without
3 creating additional problems. When we came to that conclusion,
4 we (inaudible) – it was, it was a common-sense decision. If we
5 could do it without increasing, uh, problems regarding it, uh,
6 then why not do it.
7 LUKE MORGAN: Okay. Sir, I have a, a few questions to

clarify some terms here, okay. In the protocol, is there a
saline – saline fluid flush that's run through the catheter –
catheter between each of the drugs, the active drugs that are
given during the lethal injection?
JOHN REES: There is.
LUKE MORGAN: Uh, how much of it – how much is that saline
fluid?
JOHN REES: I believe it's 25 cc's.
LUKE MORGAN: Okay. If the protocol reads 25 milligrams,
what significance does that have to you?
JOHN REES: It's obviously a typographical error.
LUKE MORGAN: Well, what – what is the significance of this
type of typographical error in –
JOHN REES: Uh, uh, everywhere else in the, in the, uh,
protocol it refers to cc's, so I – it's insignificant. It's a,
it's a it is a mistake. It is not substantive.
LUKE MORGAN: Okay, have you yourself seen these practice
trials on the lethal injection that's done there at the State
Penitentiary.?

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JOHN REES: On one occasion I have observed

the Execution
Team, uh, during one of their, uh, monthly training exercises.
LUKE MORGAN: Okay. And how are these drugs given to, uh,
during the course of this lethal injection?
THEODORE S. SHOUSE: Judge, objection. This has all been
covered in –
(Inaudible/mixed voices)
JUDGE ROGER CRITTENDEN: It's been covered.
LUKE MORGAN: Okay. Well, if I may, it's given in a
catheter, is that correct?
JOHN REES: Yes, it is.
LUKE MORGAN: Does the – does this, uh, syringe look to be
about the same size as what you have seen before during the trial
runs?
JOHN REES: Yes, sir, it does.
LUKE MORGAN: If you will – may I approach the witness,
Judge?
JUDGE ROGER CRITTENDEN: Please.
LUKE MORGAN: If you will, just for the sake of the record,
uh, tell us from here on the left side of that syringe, what
those measurements – what those numbers are and what the
measurements are, sir?
JOHN REES: Uh, cc's.

LUKE MORGAN: Okay. And what is your understanding – well, let me just go to the point here. Is your understanding that

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that is filled up with the saline solution to the level of 25 cc's?

JOHN REES: Yes, it is.

* * * *

NUMBER: OP-090901
DATE ISSUED: 04-12-78
EFFECTIVE DATE: 05-01-78

SUBJECT: Procedures for the Execution of Inmates Sentenced to Death

SUMMARY OF POLICY AND PURPOSE: It is the policy of the Oklahoma Board of Corrections that the Oklahoma Department of Corrections develop procedures to carry out the punishment of death, as defined by state statute, in a timely and efficient manner. The purpose of the Policy Statement is to insure that state statutes concerning punishment of death are complied with by the Department of Corrections.

REFERENCE: 22 O.S. (Annot.), 1014

Policy Statement No. P-090900, entitled "Procedures for Carrying Out the Death Sentence", dated 7-29-77.

PROCEDURES: The following procedures will be followed in carrying out the death sentence:

A. Prisoner preparation prior to execution

1. As soon as the Department is reasonably assured that an execution will take place, the prisoner will be provided a written summary of the rules and procedures of

the execution, so that the prisoner may plan for visits, religious assistance, and other privileges. The Warden or his designee shall meet with the prisoner to review these rules and procedures and to receive the prisoners requests regarding visitors, Ministers, food items and other privileges provided in accordance with these procedures. All determinations shall be made at this point and the prisoner shall be advised in writing of the institution's decisions regarding these matters.

2. Between 12:00 a.m. and 6:00 a.m. on the day prior to the execution, the prisoner shall be moved to a cell adjacent to the execution area.

3. During the last twenty-four hour period, a prison chaplain will be available to the prisoner continuously if the prisoner requests that a chaplain be present.

B. Prisoner visitation

1. The inmate will be allowed visiting privileges during the seven days prior to the execution during the hours of 9:00 to 11:00 a.m. and 2:00 to 4:00 p.m. for those persons on his/her visiting list. This list may be modified by the inmate within one week of submission to the inmate of the summary of the rules and procedures

of execution so that he/she may designate five visitors and one member of the clergy, all to be approved by the institution. The visits shall occur in the security visitation area and shall be under the supervision of a correctional officer, unless the Warden shall permit otherwise in extenuating circumstances. Only two visitors shall be permitted in the visitation area at any one time to visit with the prisoner. More than two visits are permitted during one period, but they must be sequended so that no more than two visitors are in the area simultaneously.

2. Visits by the attorney of record in the case shall be permitted during the above hours in the security visitation area; and under emergency circumstances at other hours, when approved by the Warden.

3. The number of visits on the last seven days may be increased to the number of immediate family members of the inmate to permit visits with each of those family members he/she desires. The length of the visit shall be limited to the hours designated above.

4. The inmate may request one or more ministers to visit and be present at the execution. The request shall be made three weeks prior to the execution. The

institution will determine which minister(s) will be permitted. The ministers shall be of recognized faiths and shall not exceed two.

5. Visits during the last twenty-four hours will be limited to clergymen and the attorney of record, and one visitor approved by the institution in the initial conference discussed above. Such visits shall occur under secure conditions in the area.

C. Location and time of execution

1. All judgments of death must be executed within the walls of Oklahoma State Penitentiary. The execution area is located on the third floor of the Administration Building. As of the issuance of this procedure, the renovations necessary to accommodate this function have not been made, but they will be accomplished with penitentiary funds.

2. All executions shall be conducted at 12:30 a.m. on the day designated by the death warrant or on the day designated by executive order of the Governor.

D. Press coverage of the execution

1. Six representatives of the press will be allowed in the execution area, including

two from the newspapers, two from radio, and two from television. Members of the press will be notified of the execution at least five days prior to the execution. Other members of the press will not be allowed in the execution area but may remain upstairs in the administrative offices of the Penitentiary. Immediately following the execution, the six representatives of the press will fully brief the remaining press, prior to filing their own stories.

2. The six representatives to witness the execution will be chosen an hour prior to the execution. Each reporter will be requested to place his/her name and media into a container. The Department will then draw names from the box, allowing two persons from the newspapers, two from radio and two from television to witness the execution.

3. Members of the press designated to the Director shall be admitted to witness the execution after showing proper identification; but no cameras, tape recorders or radio transmitters of any kind will be allowed in the execution area. Due to the solemn nature of the execution and in keeping with tradition of not allowing such devices into the area.

E. Persons allowed at the execution

1. The Warden of the Penitentiary must be present at the execution along with other necessary prison officials.

2. The Warden must invite the District Attorney and Sheriff of the county of conviction to witness the execution. The invitation will be in writing and mailed at least five (5) days prior to the execution. The press will also be notified of the execution at this time.

3. The Chief Medical Officer of the Penitentiary, or the Medical Director of the Department, or a physician designated by the Warden must be present.

4. Six witnesses, selected and approved by the Department, must be present. The witnesses will be designated three weeks prior to the execution.

5. The prisoner may select five witnesses in accordance with OS-22-1015.

6. The inmate may request two ministers of recognized faiths to be present at the execution. The ministers must be approved by the Warden and notified at least two weeks prior to the execution.

7. A list of witnesses attending the execution shall be maintained. Each person attending the execution will sign

the witness sheet (DOC 093001) before entering the execution area.

8. The only persons allowed in the execution room with the inmate are:

   a. Warden of Oklahoma State Penitentiary
   b. Deputy Warden of Oklahoma State Penitentiary
   c. Physician
   d. Chaplain
   e. Required medical and correctional personnel as designated by the Warden

   All other witnesses will be in an adjoining room, but will be able to view the execution.

9. Medical and clergy personnel shall be available for witnesses.

10. The only other persons to be allowed to witness the execution are as follows:

    a. Six Department of Corrections - designated witnesses,
    b. five prisoner - designated witnesses,
    c. six DOC - designated members of the press,
    d. two prisoner - designated ministers,
    e. ministers - designated by the institution,

f. correctional staff - designated by the institution,
g. the Director and Deputy Director or their designees,
h. the Sheriff and District Attorney of the county of correction.

11. Witnesses, except those participating in the execution process, will convene in the inmate's visiting room and will proceed as a group to the execution area at 12:00 a.m. The witnesses will be accompanied by two correctional officers or other designated prison officials. The witnesses will not be allowed to speak to the inmate. The institution may remove persons acting in such a way as to impede the conduct of these procedures.

12. Witnesses will be searched prior to entering the execution area so as to prevent any cameras, tape recorders or contraband from being carried into the area.

F. Specific execution procedures

1. The execution shall be by means of a continuous, intravenous administration of a lethal quantity of sodium thiopental combined with either tubo-curarine or succinylcholine chloride or potassium chloride which is an ultrashort-acting barbiturate combination with a chemical

paralytic agent. The Department Medical Director shall order a sufficient quantity of the substance from a pharmacy in McAlester, and the substance shall remain there until the day before the execution, when it shall be moved to the Penitentiary and be maintained in a secure area separated from other medications.

2. Just prior to the execution, the inmate will be moved from the holding cell to the execution room. The inmate shall be secured on a portable stretcher which can accommodate an intravenous catheter. The inmate's arms, legs and chest shall be restrained. A trained medical employee shall insert the catheter and any other monitoring equipment at this point. Then the prisoner shall be moved into the execution area on the stretcher. He/she will be accompanied by four correctional officers, the Warden, the Deputy Warden, the physician, a chaplain, and the trained medical employee.

3. After the prisoner is moved into the execution area, he/she will be positioned so as to face the witnesses. The end of the stretcher holding the prisoners head shall be propped up so that the prisoner will be in view of the witnesses. At this

point, the correctional officers will leave the area.

4. The bottle of fluid shall be passed through a paneled area behind the stretcher, where the persons who will inject the lethal substance into the catheter are located. At this paint, the only persons in the execution room are the Warden, Deputy Warden, the physician, medical technician, and the person(s) administering the flow of the ultrashort-acting barbituate who are behind the screen.

5. Once the medical technician has prepared the inmate, the examining physician shall inspect the catheter and monitoring equipment and determine that the fluid will flow into the vein. The Warden shall read the judgment to the inmate and ask the inmate if he/she has any last comments. After such comments as the prisoner may make, the Warden shall order the execution to begin. At this time, the person(s) behind the screened portion of the room shall begin the flow of the ultrashort-acting barbituate combination with a chemical paralytic agent. Administration of the substance shall continue until such time as the physician pronounces the inmate to be dead.

6. Upon pronouncement by the physician that the inmate is legally dead, all persons shall leave the execution area except those designated personnel responsible for removal of the body.

7. The body shall be removed to the emergency room area of the Health Services Center. If necessary, the body may then be transported to the County Medical Examiner for purpose of an autopsy.

8. Following execution, the Warden must attach a report of the death warrant and forward it to the court by which the judgment was rendered showing the time, mode and manner in which it was executed. Copies of this report shall be sent to Central Records at the Administrative Offices and the Penitentiary's records section.

9. Arrangements for the body is the responsibility of the family and will be made prior to the execution. The family will be notified by certified mail at least three weeks prior to the execution of the date of execution and of their responsibility for making arrangements for the body.

10. If the family does not make arrangements with the funeral home, the state will assume responsibility.

ACTION: The above procedures are effective immediately. It is the responsibility of the Warden of Oklahoma State Penitentiary to insure that the above procedures are implemented and that all staff required to participate in the execution are knowledgeable of these procedures and those outlined in field memoranda developed by the Penitentiary.

The Deputy Director of Institutions shall be continuously informed of the progress in accomplishing the above procedures.

/s/
F. Warren Benton, Ph.D., Director
Oklahoma Department of Corrections

DISTRIBUTION: Personnel designated per OP-0001001.

PENTOTHAL® for Injection, USP (THIOPENTAL SODIUM)

C III

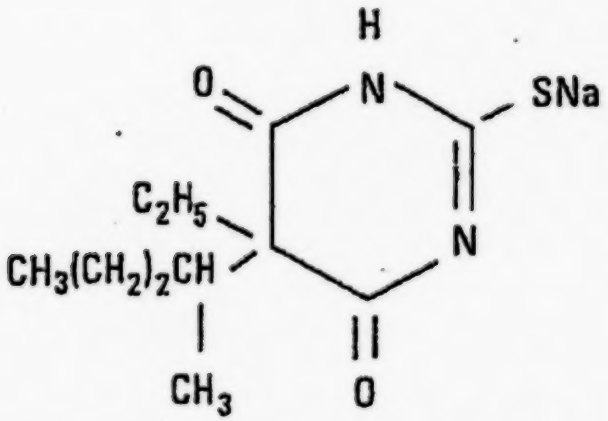
WARNING: MAY BE HABIT FORMING.

DESCRIPTION

Pentothal (Thiopental Sodium for Injection, USP) is a thiobarbiturate, the sulfur analogue of sodium pentobarbital.

The drug is prepared as a sterile powder and after reconstitution with an appropriate diluent is administered by the intravenous route.

Pentothal is chemically designated sodium 5-ethyl-5-(1-methylbutyl)-2-thiobarbiturate and has the following structural formula:



The drug is a yellowish, hygroscopic powder, stabilized with anhydrous sodium carbonate as a buffer (60 mg/g of thiopental sodium).

CLINICAL PHARMACOLOGY

Pentothal (Thiopental Sodium for Injection, USP) is an ultrashort-acting depressant of the central

nervous system which induces hypnosis and anesthesia, but not analgesia. It produces hypnosis within 30 to 40 seconds of intravenous injection. Recovery after a small dose is rapid, with some somnolence and retrograde amnesia. Repeated intravenous doses lead to prolonged anesthesia because fatty tissues act as a reservoir; they accumulate Pentothal in concentrations 6 to 12 times greater than the plasma concentration, and then release the drug slowly to cause prolonged anesthesia.

The half-life of the elimination phase after a single intravenous dose is three to eight hours.

The distribution and fate of Pentothal (as with other barbiturates) is influenced chiefly by its lipid solubility (partition coefficient), protein binding and extent of ionization. Pentothal has a partition coefficient of 580.

Approximately 80% of the drug in the blood is bound to plasma protein. Pentothal is largely degraded in the liver and to a smaller extent in other tissues, especially the kidney and brain. It has a pK_a of 7.4.

Concentration in spinal fluid is slightly less than in the plasma.

Biotransformation products of thiopental are pharmacologically inactive and mostly excreted in the urine.

INDICATIONS AND USAGE

Pentothal (Thiopental Sodium for Injection, USP) is indicated (1) as the sole anesthetic agent for brief (15

minute) procedures, (2) for induction of anesthesia prior to administration of other anesthetic agents, (3) to supplement regional anesthesia, (4) to provide hypnosis during balanced anesthesia with other agents for analgesia or muscle relaxation, (5) for the control of convulsive states during or following inhalation anesthesia, local anesthesia, or other causes, (6) in neurosurgical patients with increased intracranial pressure, if adequate ventilation is provided, and (7) for narcoanalysis and narcosynthesis in psychiatric disorders.

CONTRAINDICATIONS

Absolute Contraindications:

(1) Absence of suitable veins for intravenous administration, (2) hypersensitivity (allergy) to barbiturates and (3) variegate porphyria (South African) or acute intermittent porphyria.

Relative Contraindications:

(1) Severe cardiovascular disease, (2) hypotension or shock, (3) conditions in which the hypnotic effect may be prolonged or potentiated — excessive premedication, Addison's disease, hepatic or renal dysfunction, myxedema, increased blood urea, severe anemia, asthma, myasthenia gravis, and (4) status asthmaticus.

WARNINGS

KEEP RESUSCITATIVE AND ENDOTRACHEAL INTUBATION EQUIPMENT AND OXYGEN READILY AVAILABLE. MAINTAIN PATENCY OF THE AIRWAY AT ALL TIMES.

This drug should be administered only by persons qualified in the use of intravenous anesthetics.

Avoid extravasation or intra-arterial injection.

WARNING: MAY BE HABIT FORMING.

PRECAUTIONS

Observe aseptic precautions at all times in preparation and handling of Pentothal (Thiopental Sodium for Injection, USP) solutions.

If used in conditions involving relative contraindications, reduce dosage and administer slowly.

Care should be taken in administering the drug to patients with advanced cardiac disease, increased intracranial pressure, ophthalmoplegia plus, asthma, myasthenia gravis and endocrine insufficiency (pituitary, thyroid, adrenal, pancreas).

Drug interactions: The following drug interactions have been reported with thiopental.

Drug	Effect
Probenecid	Prolonged action of thiopental
Diazoxide	Hypotension
Zimelidine	Thiopental antagonism
Opioid analgesics	Decreased antinociceptive action
Aminophylline	Thiopental antagonism
Midazolam	Synergism

Nursing Mothers: Thiopental sodium readily crosses the placental barrier and small amounts may appear in the milk of nursing mothers following administration of large doses.

Pregnancy Category C. Animal reproduction studies have not been conducted with Pentothal. It is also not known whether Pentothal can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Pentothal should be given to a pregnant woman only if clearly needed.

ADVERSE REACTIONS

Adverse reactions include respiratory depression, myocardial depression, cardiac arrhythmias, prolonged somnolence and recovery, sneezing, coughing, bronchospasrm, laryngospasm and shivering. Anaphylactic and anaphylactoid reactions to Pentothal (Thiopental Sodium for Injection, USP) have been reported. Symptoms, e.g., urticaria, bronchospasm, vasodilation and edema should be managed by conventional means.

Rarely, immune hemolytic anemia with renal failure and radial nerve palsy have been reported.

DRUG ABUSE AND DEPENDENCE

WARNING: MAY BE HABIT FORMING.

Thiopental sodium is classified as a Schedule III controlled substance.

OVERDOSAGE

Overdosage may occur from too rapid or repeated injections. Too rapid injection may be followed by an alarming fall in blood pressure even to shock levels. Apnea, occasional laryngospasm, coughing and other respiratory difficulties with excessive or too rapid injections may occur. In the event of suspected or apparent overdosage, the drug should be discontinued, a patent airway established (intubate

if necessary) or maintained, and oxygen should be administered, with assisted ventilation if necessary. The lethal dose of barbiturates varies and cannot be stated with certainty. Lethal blood levels may be as low as 1 mg/100 mL for short-acting barbiturates; less if other depressant drugs or alcohol are also present.

MANAGEMENT OF OVERDOSAGE

It is generally agreed that respiratory depression or arrest due to unusual sensitivity to thiopental sodium or overdosage is easily managed if there is no concomitant respiratory obstruction. If the airway is patent, any method of ventilating the lungs (that prevents hypoxia) should be successful in maintaining other vital functions. Since depression of respiratory activity is one of the characteristic actions of the drug, it is important to observe respiration closely.

Should laryngeal spasm occur, it may be relieved by one of the usual methods, such as the use of a relaxant drug or positive pressure oxygen. Endotracheal intubation may be indicated in difficult cases.

DOSAGE AND ADMINISTRATION

Pentothal is administered by the intravenous route only. Individual response to the drug is so varied that there can be no fixed dosage. The drug should be titrated against patient requirements as governed by age, sex and body weight. Younger patients require relatively larger doses than middle-aged and elderly persons; the latter metabolize the drug more slowly. Pre-puberty requirements are the same for

both sexes, but adult females require less than adult males. Dose is usually proportional to body weight and obese patients require a larger dose than relatively lean persons of the same weight.

Premedication

Premedication usually consists of atropine or scopolamine to suppress vagal reflexes and inhibit secretions. In addition, a barbiturate or an opiate is often given. Sodium pentobarbital injection (Nembutal®) is suggested because it provides a preliminary indication of how the patient will react to barbiturate anesthesia. Ideally, the peak effect of these medications should be reached shortly before the time of induction.

Test Dose

It is advisable to inject a small "test" dose of 25 to 75 mg (1 to 3 mL of a 2.5% solution) of Pentothal (Thiopental Sodium for Injection, USP) to assess tolerance or unusual sensitivity to Pentothal, and pausing to observe patient reaction for at least 60 seconds. If unexpectedly deep anesthesia develops or if respiratory depression occurs, consider these possibilities: (1) the patient may be unusually sensitive to Pentothal, (2) the solution may be more concentrated than had been assumed, or (3) the patient may have received too much premedication.

Use in Anesthesia

Moderately slow induction can usually be accomplished in the "average" adult by injection of 50 to 75 mg (2 to 3 mL of a 2.5% solution) at intervals of 20 to 40 seconds, depending on the reaction of the patient. Once anesthesia is established, additional injections of 25 to 50 mg can be given whenever the patient moves.

Slow injection is recommended to minimize respiratory depression and the possibility of overdosage. The smallest dose consistent with attaining the surgical objective is the desired goal. Momentary apnea following each injection is typical, and progressive decrease in the amplitude of respiration appears with increasing dosage. Pulse remains normal or increases slightly and returns to normal. Blood pressure usually falls slightly but returns toward normal. Muscles usually relax about 30 seconds after unconsciousness is attained, but this may be masked if a skeletal muscle relaxant is used. The tone of jaw muscles is a fairly reliable index. The pupils may dilate but later contract; sensitivity to light is not usually lost until a level of anesthesia deep enough to permit surgery is attained. Nystagmus and divergent strabismus are characteristic during early stages, but at the level of surgical anesthesia, the eyes are central and fixed. Corneal and conjunctival reflexes disappear during surgical anesthesia.

When Pentothal (Thiopental Sodium for Injection, USP) is used for induction in balanced anesthesia with a skeletal muscle relaxant and an inhalation agent, the total dose of Pentothal can be estimated and then injected in two to four fractional doses. With this technique, brief periods of apnea may occur which may require assisted or controlled pulmonary ventilation. As an initial dose, 210 to 280 mg (3 to 4 mg/kg) of Pentothal is usually required for rapid induction in the average adult (70 kg).

When Pentothal (Thiopental Sodium for Injection, USP) is used as the sole anesthetic agent, the desired

level of anesthesia can be maintained by injection of small repeated doses as needed or by using a continuous intravenous drip in a 0.2% or 0.4% concentration. (Sterile water should not be used as the diluent in these concentrations, since hemolysis will occur.) With continuous drip, the depth of anesthesia is controlled by adjusting the rate of infusion.

Use in Convulsive States

For the control of convulsive states following anesthesia (inhalation or local) or other causes, 75 to 125 mg (3 to 5 mL of a 2.5% solution) should be given as soon as possible after the convulsion begins. Convulsions following the use of a local anesthetic may require 125 to 250 mg of Pentothal given over a ten minute period. If the convulsion is caused by a local anesthetic, the required dose of Pentothal will depend upon the amount of local anesthetic given and its convulsant properties.

Use in Neurosurgical Patients with Increased Intracranial Pressure

In neurosurgical patients, intermittent bolus injections of 1.5 to 3.5 mg/kg of body weight may be given to reduce intraoperative elevations of intracranial pressure, if adequate ventilation is provided.

Use in Psychiatric Disorders

For narcoanalysis and narcosynthesis in psychiatric disorders, premedication with an anticholinergic agent may precede administration of Pentothal. After a test dose, Pentothal (Thiopental Sodium for Injection, USP) is injected at a slow rate of 100 mg/min (4 mL/min of a 2.5% solution) with the

patient counting backwards from 100. Shortly after counting becomes confused but before actual sleep is produced, the injection is discontinued. Allow the patient to return to a semidrowsy state where conversation is coherent. Alternatively, Pentothal may be administered by rapid I.V. drip using a 0.2% concentration in 5% dextrose and water. At this concentration, the rate of administration should not exceed 50 mL/min.

MANAGEMENT OF SOME COMPLICATIONS

Respiratory depression (hypoventilation, apnea), which may result from either unusual responsiveness to Pentothal or overdosage, is managed as stated above. Pentothal should be considered to have the same potential for producing respiratory depression as an inhalation agent, and patency of the airway must be protected at all times.

Laryngospasm may occur with light Pentothal narcosis at intubation, or in the absence of intubation if foreign matter or secretions in the respiratory tract create irritation. Laryngeal and bronchial vagal reflexes can be suppressed, and secretions minimized by giving atropine or scopolamine premedication and a barbiturate or opiate. Use of a skeletal muscle relaxant or positive pressure oxygen will usually relieve laryngospasm. Tracheostomy may be indicated in difficult cases.

Myocardial depression, proportional to the amount of drug in direct contact with the heart, can occur and may cause hypotension, particularly in patients with an unhealthy myocardium. Arrhythmias may appear if PCO_2 is elevated, but they are uncommon with adequate ventilation. Management of

myocardial depression is the same as for overdosage. Pentothal (Thiopental Sodium for Injection, USP) does not sensitize the heart to epinephrine or other sympathomimetic amines.

Extravascular infiltration should be avoided. Care should be taken to insure that the needle is within the lumen of the vein before injection of Pentothal Extravascular injection may cause chemical irritation of the tissues varying from slight tenderness to venospasm, extensive necrosis and sloughing. This is due primarily to the high alkaline pH (10 to 11) of clinical concentrations of the drug. If extravasation occurs, the local irritant effects can be reduced by injection of 1% procaine locally to relieve pain and enhance vasodilatation. Local application of heat also may help to increase local circulation and removal of the infiltrate.

Intra-arterial injection can occur inadvertently, especially if an aberrant superficial artery is present at the medial aspect of the antecubital fossa. The area selected for intravenous injection of the drug should be palpated for detection of an underlying pulsating vessel. Accidental intra-arterial injection can cause arteriospasm and severe pain along the course of the artery with blanching of the arm and fingers. Appropriate corrective measures should be instituted promptly to avoid possible development of gangrene. Any patient complaint of pain warrants stopping the infection. Methods suggested for dealing with this complication vary with the severity of symptoms. The following have been suggested:

1. Dilute the injected Pentothal (Thiopental Sodium for Injection, USP) by removing the tourniquet and any restrictive garments.
2. Leave the needle in place, if possible.
3. Inject the artery with a dilute solution of papaverine, 40 to 80 mg, or 10 mL of 1% procaine, to inhibit smooth muscle spasm.
4. If necessary, perform sympathetic block of the brachial plexus and/or stellate ganglion to relieve pain and assist in opening collateral circulation. Papaverine can be injected into the subclavian artery, if desired.
5. Unless otherwise contraindicated, institute immediate heparinization to prevent thrombus formation.
6. Consider local infiltration of an alpha-adrenergic blocking agent such as phentolamine into the vasospastic area.
7. Provide additional symptomatic treatment as required.

Shivering after Pentothal anesthesia, manifested by twitching face muscles and occasional progression to tremors of the arms, head, shoulder and body, is a thermal reaction due to increased sensitivity to cold. Shivering appears if the room environment is cold and if a large ventilatory heat loss has been sustained with balanced inhalation anesthesia employing nitrous oxide. Treatment consists of warming the patient with blankets, maintaining room temperature near 22° C (72° F), and

administration of chlorpromazine or methylphenidate.

PREPARATION OF SOLUTIONS

Pentothal (Thiopental Sodium for Injection, USP) is supplied as a yellowish, hygroscopic powder in a variety of different containers. Solutions should be prepared aseptically with one of the three following diluents: Sterile Water for Injection, USP, 0.9% Sodium Chloride Injection, USP or 5% Dextrose Injection, USP. Clinical concentrations used for intermittent intravenous administration vary between 2.0% and 5.0%. A 2.0% or 2.5% solution is most commonly used. A 3.4% concentration in sterile water for injection is isotonic; concentrations less than 2.0% in this diluent are not used because they cause hemolysis. For continuous intravenous drip administration, concentrations of 0.2% or 0.4% are used. Solutions may be prepared by adding Pentothal to 5% Dextrose Injection, USP, 0.9% Sodium Chloride Injection, USP or Normosol®-R pH 7.4.

Since Pentothal contains no added bacteriostatic agent, extreme care in preparation and handling should be exercised at all times to prevent the introduction of microbial contaminants. Solutions should be freshly prepared and used promptly; when reconstituted for administration to several patients, unused portions should be discarded after 24 hours. Sterilization by heating should not be attempted.

WARNING: The 2.5 g and larger sizes contain adequate medication for several patients.

COMPATIBILITY

Any solution of Pentothal (Thiopental Sodium for Injection, USP) with a visible precipitate should not be administered. The stability of Pentothal solutions depends upon several factors, including the diluent, temperature of storage and the amount of carbon dioxide from room air that gains access to the solution. Any factor or condition which tends to lower pH (increase acidity) of Pentothal solutions will increase the likelihood of precipitation of thiopental acid. Such factors include the use of diluents which are too acidic and the absorption of carbon dioxide which can combine with water to form carbonic acid.

Solutions of succinylcholine, tubocurarine or other drugs which have an acid pH should not be mixed with Pentothal solutions. The most stable solutions are those reconstituted in water or isotonic saline, kept under refrigeration and tightly stoppered. The presence or absence of a visible precipitate offers a practical guide to the physical compatibility of prepared solutions of Pentothal.

CALCULATIONS FOR VARIOUS CONCENTRATIONS

Concentration Desired		Amounts to Use	
		Pentothal	Diluent
Percent	mg/ml.	g	mL
0.2	2	1	500
0.4	4	1	250
		2	500
2.0	20	5	250
		10	500
2.5	25	1	40

		670	
		5	200
5	50	1	20
		5	100

Reconstituted solutions of Pentothal (Thiopental Sodium for Injection, USP) should be inspected visually for particulate matter and discoloration, whenever solution and container permit.

HOW SUPPLIED

Pentothal is available in a variety of sizes and containers shown at the end of this insert.

Diluents in Pentothal® Kits

READY-TO-MIX SYRINGES AND VIALS

(For preparing solutions of Thiopental Sodium for Injection, USP)

DESCRIPTION

The following diluents in various container, syringe and vial sizes are provided in Pentothal Kits, Pentothal Ready-to-Mix Syringes and Vials for preparing solutions of Pentothal (Thiopental Sodium for Injection, USP) for clinical use:

Sterile Water for Injection, USP is a sterile, nonpyrogenic preparation of water for injection which contains no bacteriostat, antimicrobial agents or added buffers. The pH is 5.7 (5.0 to 7.0).

Sterile Water for Injection, USP is a pharmaceutic aid (solvent) for intravenous administration only after addition of a solute.

Water is chemically designated H_2O.

0.9% Sodium Chloride Injection, USP is a sterile, nonpyrogenic, isotonic solution of sodium chloride and water for injection. Each mL contains sodium chloride 9 mg (308 mOsmol/liter calc). It contains no bacteriostat, antimicrobial agents or added buffers except for pH adjustment. May contain hydrochloric acid and/or sodium hydroxide for pH adjustment. pH is 5.7 (4.5 to 7.0).

0.9% Sodium Chloride Injection, USP is an isotonic vehicle for intravenous administration of another solute.

Sodium chloride is chemically designated NaCl, a white crystalline compound freely soluble in water.

The semi-rigid vial contained in List Nos. 3329, 6418, 6419, 6420 and 6435 is fabricated from a specially formulated polyolefin. It is a copolymer of ethylene and propylene. The safety of the plastic has been confirmed by tests in animals according to USP biological standards for plastic containers. The container requires no vapor barrier to maintain the proper labeled volume.

CLINICAL PHARMACOLOGY

Sterile Water for Injection, USP serves only as a pharmaceutic aid for diluting or dissolving drugs prior to administration.

Water is an essential constituent of all body tissues and accounts for approximately 70% of total body weight. Average normal adult daily requirement ranges from two to three liters (1.0 to 1.5 liters each for insensible water loss by perspiration and urine excretion).

Water balance is maintained by various regulatory mechanisms. Water distribution depends primarily on the concentration of dissociated electrolytes in the body compartments and sodium (Na^+) plays a major role in maintaining a physiologic equilibrium between fluid intake and output.

0.9% Sodium Chloride Injection, USP serves only as an isotonic vehicle for drugs prior to administration.

Sodium chloride in water is an electrolyte solution of sodium (Na^+) and chloride (Cl^-) ions. These ions are normal constituents of the body fluids (principally extracellular) and are essential for maintaining electrolyte balance.

The distribution and excretion of sodium (Na^+) and chloride (Cl^-) are largely under the control of the kidney which maintains a balance between intake and output of these ions.

The small volumes of fluid and amounts of sodium chloride provided by 0.9% Sodium Chloride Injection in Ready-to-Mix Syringes are unlikely to produce a significant effect on fluid or electrolyte balance.

INDICATIONS AND USAGE

These products are indicated only for preparing Pentothal (Thiopental Sodium for Injection, USP) solutions for clinical use.

CONTRAINDICATIONS

Do not use unless the diluent is clear and the bottle or vial seal or syringe package is undamaged.

Diluents in Pentothal Kits, Ready-to-Mix Syringes or Vials should not be used for fluid or sodium chloride replacement.

WARNINGS

Intravenous administration of Sterile Water for Injection, USP without a solute may result in hemolysis.

Use aseptic technique for preparing Pentothal solutions when using Pentothal Kits, Syringes or Vials and during withdrawal from reconstituted single or multiple-use containers.

Administer only clear reconstituted solutions.

Use within 24 hours after reconstitution. Discard unused portions.

PRECAUTIONS

Do not use unless solution is clear and container is undamaged.

Inspect reconstituted (mixed) solutions of Pentothal (Thiopental Sodium for Injection, USP) for clarity and freedom from precipitation or discoloration prior to administration. Use reconstituted solution only if it is clear, free from precipitate and not discolored.

Use Transfer Label in each Pentothal Kit and affix to container of reconstituted solution to show concentration and time of preparation.

Pregnancy Category C. Animal reproduction studies have not been conducted with sterile water for injection or sodium chloride injection. It is also not known whether sterile water or sodium chloride

injection containing additives can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Sterile water for injection or sodium chloride injection with additives should be given to a pregnant woman only if clearly needed.

ADVERSE REACTIONS

Reactions which may occur because of the diluents, technique of preparation or mixing, or administration of reconstituted solutions of Pentothal include febrile response or infection at the site of injection, venous thrombosis or phlebitis extending from the site of injection and extravasation.

If an adverse reaction does occur, discontinue the injection, evaluate the patient, institute appropriate therapeutic countermeasures and save the remainder of unused solution (or the used container or syringe) for examination if deemed necessary.

DRUG ABUSE AND DEPENDENCE

None known.

OVERDOSAGE

Used as diluents for preparing solutions of Pentothal (Thiopental Sodium for Injection, USP) the small volumes of administered fluid (from Sterile Water for Injection in bottles and vials) and amounts of sodium chloride (from 0.9% Sodium Chloride Injection in Ready-to-Mix Syringes) are unlikely to pose a threat of fluid or sodium chloride overload.

DOSAGE AND ADMINISTRATION

Pentothal solutions should be administered only by intravenous injection and by individuals experienced in the conduct of intravenous anesthesia.

The volume and choice of diluent for preparing Pentothal (Thiopental Sodium for Injection, USP) solutions for clinical use depends on the concentration and vehicle desired. Pentothal Kits provide only Sterile Water for Injection as the diluent for individual or multi-patient use; Pentothal Ready-to-Mix Syringes provide only 0.9% Sodium Chloride Injection, USP as the diluent for individual patient use; vials provide only Sterile Water for Injection, USP as the diluent for individual patient use.

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit. See PRECAUTIONS.

HOW SUPPLIED

The diluent in Pentothal Kits is supplied in various size containers with various dosage sizes of Pentothal (Thiopental Sodium for Injection, USP). Kits include all items needed for aseptic transfer of Pentothal powder from a squeeze bottle into the diluent container.

The diluent in Pentothal Ready-to-Mix Syringes is supplied in a separate container to permit mixing with the Pentothal in a powder vial to permit immediate intravenous injection of reconstituted solution into a vein or attachment to a standard stopcock assembly.

Vials are supplied in cartons with different dosage sizes of Pentothal for preparing 2.0% or 2.5% concentrations by using a separate syringe (not supplied) for mixing.

See table for list of sizes available.

Store at controlled room temperature 15° to 30°C (59° to 86°F).
Keep reconstituted solution in a cool place.
Caution: Federal (USA) law prohibits dispensing without prescription.
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ABBOTT LABORATORIES, NORTH CHICAGO, IL 60064, USA

Table: Pentothal® (Thiopental Sodium for Injection, USP) and Diluent in Kits Ready-to-Mix Syringes and Ready-to-Mix Lifeshield® Syringes

List No.	Pentothal	Pentothal Container	Diluent (mL)*	Diluent Container	Theoretical Reconstituted Conc.
6259 (Kit)	2.5 g	Squeeze Bottle	W (125)	PF Bottle	2% (20 mg/mL)
6108 (Kit)	5 g	Squeeze Bottle	W (250)	PF Bottle	2% (20 mg/mL)
6244 (Kit)	1 g	Squeeze Bottle	W (40)	PF Bottle	2.5% (25 mg/mL)
6260 (Kit)	2.5 g	Squeeze Bottle	W (100)	PF Bottle	2.5% (25 mg/mL)
6504 (Kit)	5 g	Squeeze Bottle	W (200)	Bottle	2.5% (25 mg/mL)
6435 (Kit)	1 g	Vial	W (50)	Plastic Vial	2% (20 mg/mL)
3329 (Kit)	500 mg	Vial	W (20)	Plastic Vial	2.5% (25 mg/mL)
9087 (Kit)	1 g	Vial	W (50)	Plastic Vial	2% (20 mg/mL)
9088 (Kit)	500 mg	Vial	W (20)	Plastic Vial	2.5% (25 mg/mL)
6246 (Ready-to-Mix Syringe)	100 mg	Syringe	S (20)	Syringe	2% (20 mg/mL)
6211 (Ready-to-Mix Syringe)	250 mg	Syringe	S (10)	Syringe	2.5% (25 mg/mL)
6243 (Ready-to-Mix Syringe)	500 mg	Syringe	S (20)	Syringe	2.5% (25 mg/mL)

3351 (Ready-to-Mix LifeShield Syringe	250 mg	Syringe	S (10)	Plastic Vial	2.5% (25 mg/mL)
3352 (Ready-to-Mix LifeShield Syringe	400 mg	Syringe	S (20)	Plastic Vial	2% (20 mg/mL)
3353 (Ready-to-Mix LifeShield Syringe	500 mg	Syringe	S (20)	Plastic Vial	2.5% (25 mg/mL)
6418 (Ready-to-Mix Syringe)	250 mg	Syringe	W (10)	Plastic Vial	2.5% (25 mg/mL)
6419 (Ready-to-Mix Syringe)	400 mg	Syringe	W (20)	Plastic Vial	2% (20 mg/mL)
6420 (Ready-to-Mix Syringe)	500 mg	Syringe	W (20)	Plastic Vial	2.5% (25 mg/mL)

PF — denotes Partial-Fill
W denotes Sterile Water for Injection, USP
S denotes 0.9% Sodium Chloride Injection, USP

* Diluent containers are slightly overfilled to assure compliance with USP minimum fill volume requirements.

COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
DIV. I

RALPH BAZE and, THOMAS C. BOWLING, Plaintiffs, v. JONATHAN D. REES, Commissioner, Kentucky Department of Corrections, Frankfort Kentucky GLENN HAEBERLIN, Warden, Kentucky State Penitentiary, Eddyville Kentucky, and, HON. ERNIE FLETCHER, Governor of Kentucky Defendants.	CIV. ACTION # 04-CI-01094 **PLAINTIFFS' POST-TRIAL BRIEF**

"Absolute fires of hell." "Agony." "Tremendous amount of pain." "I wanted to die from the pain." "Bleed to death." During almost twenty hours of testimony, witnesses used these phrases to describe the pain and suffering potentially caused by the chemicals and procedures used in Kentucky lethal injections - - pain and suffering that is not necessary and could be easily avoided by using readily available alternatives.

Each of the chemicals used in Kentucky poses an unnecessary risk of pain and suffering in violation of the Eighth Amendment ban on cruel and unusual punishment. The killing agent - - potassium chloride - - causes extreme burning and involuntary muscle reactions resembling convulsions - - so unpleasant to the viewer that Defendants inject a chemical for the sole purpose of preventing people from seeing them. That chemical, pancuronium bromide, unnecessary to cause death, paralyzes all voluntary muscle causing the agony of suffocation and making it extremely difficult to determine if an inmate is conscious during an execution.

Defendants do nothing to ensure that an inmate is unconscious prior to injecting pancuronium bromide and potassium. They continue to use an ultra-shorting acting anesthetic when more reliable anesthetics are available. They had no idea what anesthesia awareness was. After being told about it, they have done nothing to alleviate the risk of it or to monitor for it. Instead, they hastily applied a hodge podge of "band-aid" quasi-solutions, including sticking a needle in a location that could cause a person to bleed to death or a location that would require a two-inch incision, allowing the condemned inmate to be

stuck with a needle for 60 minutes, and adding a crash cart in case a last minute stay is granted, and assigning the revival responsibilities to a psychiatrist. These are not the acts of individuals concerned with ensuring that an execution is carried out constitutionally, with as little pain and suffering as possible. These are the acts of Defendants who were made aware that the chemicals and procedures they use for lethal injection create an unnecessary risk of pain and suffering, and who have decided to act deliberately indifferent towards that risk.

FACTS

Almost 30 years ago, lethal injection first became a method of execution. Tape 1; 4/18/05; 10:05:04 (Testimony of Prof. Deborah Denno). After conducting no scientific or medical studies, Oklahoma adopted the two-drug cocktail of sodium thiopental and a paralytic agent, which it believed potassium chloride to be. *Id.* Potassium chloride is not a paralytic agent. *See* Tape 3; 4/19/05; 11:30:30 (Testimony of Dr. Hiland); Tape 2; 4/18/05; 16:36:07 (Testimony of Defendant Haeberlin). Yet, this erroneous language in Oklahoma's protocol became the model for every other state's lethal injection protocol. States saw the words "paralytic agent," "potassium chloride," and "thiopental," and thought all three were needed. Numerous states blindly copied Oklahoma, thinking they meant three chemicals. Tape 1; 4/18/05; 10:07:36 (Testimony of Prof. Deborah Denno). No state, including Kentucky, ever conducted scientific or medical research on whether any of these chemicals caused pain when used in combination, or whether alternative

chemicals that pose less risk of conscious pain and suffering exist. *Id.* at 10:09:40.

Kentucky is one of the states that blindly adopted the tri-chemical cocktail of sodium thiopental, pancuronium bromide, and potassium chloride. Tom Campbell, who was involved in adopting Kentucky's lethal injection protocol testified that Kentucky did not conduct any scientific or medical studies on how to implement lethal injection and that no doctors or scientific literature were consulted prior to adopting the Kentucky lethal injection protocol. Tape 1; 4/1/8/05; 10:43:45. Bill Henderson stated the same thing and added that Defendants just looked at other state protocols in adopting the lethal injection chemicals. Tape 1; 4/18/05; 10:55:10. Phil Parker, the Warden, who actually wrote the protocol and decided on what chemicals to use for lethal injection, testified that he never consulted an anesthesiologist or any other medical personnel when deciding what chemicals to use for lethal injection. Tape 2; 4/18/05; 2:07:50. Instead, he just looked at the other states, believed (mistakenly) they all used the same three drugs, and adopted sodium thiopental, pancuronium bromide, and potassium chloride, because that is what he believed all other states were using. *Id.* Again, no scientific or medical studies were consulted on the effects of these chemicals when used in combination or whether alternative chemicals that pose less risk of pain existed. *Id.*

If Defendants had consulted medical professionals about these chemicals or conducted any scientific or

medical research into the effects of the chemicals, they would have learned:

1) that none of the chemicals used in Kentucky lethal injections relieve pain (*see, e.g.*, Tape 4; 4/20/05; 1:26:51 (Testimony of Dr. Heath));

2) that sodium thiopental is an ultra short acting barbiturate that usually wears off in 5 minutes or less (*Id.* at 1:28:30; Tape 3; 4/19/05; 12:32:34 (Testimony of Dr. Haas));

3) that thiopental may have been a state of the art anesthetic when lethal injection was adopted in this country, but it has been supplanted by a safer drug that does not have to be mixed (*Compare* Tape 3; 4/19/05; 11:50:00, 11:55:50 (Testimony of Dr. Hiland); *with*, Tape 4; 4/20/05; 1:49:40 (Testimony of Dr. Heath));

4) that potassium chloride, the third chemical administered, is the chemical that causes death (*See, e.g.*, Tape 4; 4/20/05; 2:03:24 (Testimony of Dr. Heath));

5) that potassium chloride is extremely painful in a conscious person, and that less painful drugs exist that quickly stop the heart from beating (Tape 4; 4/20/05; 1:46:40 (Testimony of Dr. Heath); *accord*, Tape 6; 5/2/05; 11:15:10; (Testimony Dr. Dershwitz));

6) that the second chemical, pancuronium bromide otherwise known as pavulon, neither renders a person unconscious nor causes death as long a potassium chloride is used, and therefore serves no purpose during a lethal injection other than the illegitimate purpose of preventing people from seeing the body convulse from the reaction of potassium chloride (*See, e.g.* Tape 4; 4/20/05; 2:03:24));

7) that pancuronium paralyzes the body, creating a situation where the person is unable to move whether conscious or not, thus greatly increasing the risk of unnecessary pain and suffering (*See, e.g.*, Tape 4; 4/20/05; 1:31:35 (Testimony of Dr. Heath); Tape 6; 5/2/05; 10:07:10 (Testimony of Dr. Dershwitz);

8) that it is odd to use a short acting barbiturate followed by a long acting paralytic agent because that could result in a person regaining consciousness but being unable to express it because of paralysis, a phenomenon known as anesthesia awareness, which as Carol Weihrer told us, is so painful that one wants to die (Tape 4; 5/20/05 1:46:40) (Testimony of Dr. Heath); Tape 4; 5/20/05; 10:16:18 Testimony of Carol Weihrer));

9) that pancuronium prevents people from determining whether a person is conscious but paralyzed, a risk that is substantially increased in Kentucky lethal injections as compared to surgical settings, because Kentucky lethal injections inject a long acting paralytic agent after injecting an ultra short acting barbiturate (*Id.*);

10) that not all states use the same chemicals as Kentucky ---New Jersey, for instance, does not use a paralytic agent (Tape 1; 4/18/05; 10:10:39 (Testimony of Prof. Deborah Denno); and,

11) that an alternative chemical or combination of chemicals that pose less risk of unnecessary pain and suffering during an execution exist.

Defendants could have learned all of this and taken steps to avoid these problems if they had conducted any medical or scientific studies or consulted with any medical

personnel. Defendants could have done this prior to adopting their tri-chemical cocktail for lethal injection, as shown by testimony of numerous doctors during this trial. Instead of inquiring whether any problems exist with the chemicals used in lethal injections, Defendants blindly followed what other states had done and used the tri-chemical cocktail to execute Eddie Harper. Tape 2; 4/18/05; 2:07:50 (Testimony of Phil Parker).

As one would expect from using a chemical combination that was blindly adopted because other states used those chemicals in the past, Harper's execution was problematic. The witnesses, however, were unaware of the problems because of the use of a paralytic agent. Witnesses testified that Harper appeared to go to sleep within a minute of the injection of thiopental and remained asleep for the entire execution. *See, e.g.*, Tape 2; 4/18/05; 11:21:50 (Testimony of Bill Henderson). Yet, their observations are unreliable. The paralytic agent would make anyone seem asleep, even when they are paralyzed but consciously suffering the agony of pancuronium bromide, and the pain of potassium chloride. The EKG readout shows that Harper was alive after the thiopental was injected, and also alive when the pancuronium bromide was injected. Tape 4; 4/20/05; 2:10:08 (Testimony of Dr. Heath). It was not until a minute after the injection of potassium chloride, which was five minutes after the lethal injection began, that Harper died. *Id.* Thus, the potassium chloride killed Harper. *Id.*

Post mortem thiopental levels from Harper show that the risk of consciously suffering pain is not just a

theoretical event, but a reality that likely occurred to him –or at the least – that there was an unnecessary risk that he was consciously experiencing excruciating pain and suffering during his execution · · a risk that could be alleviated if not avoided altogether.

During Harper's autopsy, Dr. Tracey Corey (Kentucky's Chief Medical Examiner, and a board certified Forensic Pathologist) drew blood from the most reliable location for determining post mortem concentrations of blood · · peripheral blood. Tape 2; 4/18/05; 2:21:30 (Testimony of Dr. Corey). Specifically, she drew blood from the vena cava and the axilliary vein because thiopental levels found in those locations would show that the thiopental cycled through the entire body and therefore the levels in the vena cave and the axilliary vein would reflect the level of thiopental in the brain · · the location that effects consciousness. *Id.* at 2:22:20. The heart, on the other hand, is disproportionately high because of redistribution of the chemicals. Tape 2; 4/18/05; 2:56:30 (Testimony of Michael Ward). Michael Ward, who has over 29 years of experience as a toxicologist, confirmed that peripheral blood is the most reliable indicator of thiopental levels in the body at the time of death. *Id.* at 2:52:00; *accord*, Tape 5; 4/21/05; 10:20:20 (Testimony of Dr. Watson). Ward testified that Harper's blood was properly preserved and correctly tested for the concentration of thiopental at the time of Harper's death. *Id.* at 2:57:30.

Ward found 3 mg/L of thiopental in Harper's vena cava · · a level that was validated by the finding of 3 mg/L of thiopental in Harper's axilliary vein (locations that

would have been zero if the thiopental did not cycle through the body) - - and 6.5 mg/L of thiopental in Harper's heart. *Id.* at 2:56:15. The higher level in Harper's heart is consistent with the redistribution that is seen in thiopental after death. *Id.* at 2:56:30. As each medical witness testified (except for Dr. Dershwitz who only talked about situations where thiopental is used in combination with other drugs), at least 35 mg/L of thiopental in the blood is necessary to ensure that a person will not wake up from painful stimuli during a surgical procedure. Tape 2; 4/18/05; 2:54:50 (Testimony of Michael Ward); Tape 5; 4/21/05; 10:17:30 (Testimony of Dr. Watson). Even Defendants' medical expert admitted that the 6.5 mg/L in Harper's heart was troubling and that more than 50% of the population would be able to feel pain at that level. Tape 6; 5/02/05; 10:21:48, 11:34:55 (Testimony of Dr. Dershwitz). In fact, he has also stated that after 5 minutes, with 3 grams of thiopental, a person would not be at the level of general anesthesia. *Id.* at 11:40:00. Thus, when Harper died, although he appeared unconscious - - he was able to feel painful stimuli.

In light of this information proving that problems existed with Harper's execution and that chemicals that pose less risk of conscious pain and suffering exist, Defendants had the opportunity to undertake precautions to alleviate or lessen the risk of pain and suffering, but failed to do so. Instead, they made the bare minimum of changes solely is an attempt to end this lawsuit.

After the litigation began, Defendant Haeberlin, Defendant Rees, and General Counsel for Defendants made changes to the lethal injection protocol. Yet, they

failed to consult any medical books. They failed to speak with an anesthesiologist or any other medical personnel knowledgeable in the effects of the chemicals when used in combination. They failed to consult any medical books or medical personnel about what other chemicals exist. They failed to learn what monitoring is necessary to determine whether a person is suffering from anesthesia awareness. Tape 2; 4/18/05; 3:11:55 (Testimony of Defendant Rees); Tape 3; 4/19/05; 10:02:20 (Testimony of Defendant Haberlin) (no medical personnel consulted on 2004 revisions). Instead, individuals with no medical knowledge made medical changes to Kentucky's lethal injection protocol.

Defendant Rees testified that he, Defendant Haeberlin, and their General Counsel decided to increase the amount of thiopental from 2 –3 grams. Tape 2; 4/18/05; 3:10:55 (Testimony of Defendant Rees). In doing so, they never consulted anyone in the medical field, a fact that Warden Haeberlin confirmed. Tape 3; 4/19/05; 10:02:20 (Testimony of Defendant Haeberlin). And, possibly as a result, they failed to recognize that unless they fixed the problem with getting the 2 grams in, 3 grams also would not work. Tape 5; 4/21/05; 11:44:42 (Testimony of Dr. Watson).

So, why is 2 or 3 grams of thiopental not ensuring that an inmate is conscious when executed? Many possible reasons exist. The I.V. may not be properly inserted in the vein. Defendants are not properly monitoring for this. Tape 4; 4/20/05; 2:36:00 (Testimony of Dr. Heath). The I.V. could be leaking at the I.V. team location. No one is monitoring for this. Or, what about

the issue of concentration of thiopental that Dr. Heath discussed in detail, and Defendants did not understand? Defendants kept confusing cc with concentration/volume. Tape 4; 4/20/05; 3:57:38 (Testimony of Dr. Heath). As Dr. Heath explained, cc and concentration/volume are not the same thing. A dose of 3 grams of thiopental, ten grams, or even a 100 grams, is meaningless unless one knows what concentration of thiopental is being administered. *Id.* at 2:46:00. If thiopental is too diluted, the amount of thiopental getting into the body is not as potent · · lasts a shorter amount of time – just is not as strong · · and takes longer to reach full effect. *Id.* at 2:47:00. Is this what happened with Harper? Possibly. So, what are Defendants doing about it? Nothing. Kentucky's lethal injection protocol, unlike the more than 30 execution protocols that Dr. Heath has reviewed, does not specify the concentration of thiopental being administered. *Id.* at 2:46:00. Thus, we don't know if they are injecting a high enough concentration of thiopental to ensure that Plaintiffs will not suffer unnecessary pain and suffering during their execution. Harper's post mortem thiopental levels, however, suggest strongly that Defendants are giving too low a concentration of thiopental. Thus, the increase from 2 to 3 grams clearly does not solve this problem. *Id.* at 2:47:24.

So, what other problems did DOC try to cover up with a band aid without fixing? They never looked at the chemicals KY uses for lethal injections, and whether alternative chemical combinations exist. Tape 1; 4/18/05; 3:13:30 (Testimony of Defendant Rees); Tape 3; 4/19/05; 10:35:40 (Testimony of Defendant Haeberlin). Defendant Rees testified that he viewed other states' protocols as did

Warden Haeberlin, but they were unaware - - in fact Rees was shocked to learn - - that some states do not use the same chemicals as Kentucky uses for lethal injection. *Id.*; Tape 3; 4/19/05; 10:35:40 (Testimony of Defendant Haeberlin). For instance, New Jersey does not use pancuronium bromide, and thus they are able to determine if a person is awake or not. Tape 1; 4/18/05; 10:10:39 (Testimony of Prof. Deborah Denno). Defendants also did not look at what chemicals are available to stop the heart from beating. Tape 1; 4/18/05; 3:13:30 (Testimony of Defendant Rees); Tape 3; 4/19/05; 10:35:40 (Testimony of Defendant Haeberlin). As Dr. Heath testified, chemicals less painful than potassium chloride would do the job. Tape 4; 4/20/05; 1:46:40 (Testimony of Dr. Heath). They also did not look at the continued viability of thiopental. Tape 1; 4/18/05; 3:13:30 (Testimony of Defendant Rees); Tape 3; 4/19/05; 10:35:40 (Testimony of Defendant Haeberlin). If they did, they would have learned that it has been supplanted by other anesthetics that pose less risk of pain and suffering. Tape 4; 4/20/05; 1:49:56 (Testimony of Dr. Heath).

One would think that having been made aware of anesthesia awareness through this litigation, Defendants would have taken steps to ensure that Plaintiffs are unconscious during their execution. Yet, they have done nothing of the sort. They do not ensure unconsciousness prior to injecting the paralytic agent. They do not have an EKG in the execution room to monitor for consciousness - - instead only using the EKG to determine death. They do not use blood pressure cuffs to monitor for consciousness. All equipment that easily could be used and regularly are used in surgical procedures. Instead,

Defendants remain willfully blind to the concept of anesthesia awareness. Defendant Haeberlin and Deputy Warden Pershing – the only people in the execution chamber with the condemned during an execution - - claimed to have no knowledge of anesthesia awareness. Tape 3; 4/19/05; 10:13:00 (Testimony of Defendant Haeberlin); Tape 3; 4/19/05; 11:22:20 (Testimony of Richard Pershing). Of course, as they conceded this means that they don't know what to look for to determine whether a person is consciously paralyzed. *Id.* Yet, they could have learned this merely by asking their medical staff and then taking the appropriate steps to have the proper equipment present and to have people on site trained in using the equipment.

Instead of reducing the risk of unnecessary pain, Defendants have made executions in Kentucky more painful. First, Defendant Rees, who has no medical knowledge suggested that the I.V. team must attempt to insert a needle for up to one hour. Tape 2; 4/19/05; 3:12:00. General Counsel and Defendant Haeberlin agreed to this without consulting any medical personnel. *Id.* at 3:12:44. Attempting to insert an I.V. for up to an hour is not only unnecessarily painful, but also contrary to current medical knowledge. Dr. Heath testified that he would never do such a thing and that it would not only be quite painful but also gratuitous. After about 20 minutes, the I.V. team will have exhausted all potential I.V. sites. Tape 4; 4/20/05; 2:48:18 (Testimony of Dr. Heath). Thus, the additional 40 minutes inflicts unnecessary pain as the I.V. team continues to attempt to insert a needle into locations they already know will be unsuccessful. *Id.*

Second, the current protocol allows the I.V. team to insert a needle in the neck. Numerous DOC officials including Defendant Haeberlin stated that the I.V. would be inserted into the carotid artery. Tape 3; 4/19/05; 10:15:17. Yet, Defendants' own medical director, the doctor at the prison where executions are carried out, and another one of their doctors, stated that they would never insert an I.V. into the carotid artery. Tape 3; 4/19/05; 11:47:08 (Testimony of Dr. Hiland); Tape 3; 4/19/05; 12:14:50 (Testimony of Dr. Haas); Tape 4; 4/20/05; 10:05:53 (Testimony of Nurse Wood); Tape 5; 4/21/05; 1:48:28 (Testimony of Dr. Rafi). They stated that inserting an I.V. into the carotid artery would be extremely painful, could cause the condemned to suffocate, and could even kill the inmate. *Id.* Dr. Rafi stated that an I.V. could be inserted into the jugular vein in the neck. Tape 5; 4/21/05; 1:58:46. But, how this could be done in Kentucky lethal injections remains to be seen. Inserting an I.V. into the jugular vein would require a two-inch incision into the neck, which is not in the execution protocol. Tape 6; 4/21/05; 11:17:50 (Testimony of Dr. Dershwitz). And, even beyond that, Defendants have stated that they are not prepared or trained to make such an incision, which is similar to inserting a "central line."

Finally, they have added a crash cart in case a stay of execution occurs at the last minute. A possibility that is so strong that a New Jersey court stopped all executions until a properly trained crash cart team with the proper equipment is readily available to intervene if a last minute stay of execution is granted. *In the Matter of Readoption with Amendments of Death Penalty Regulations*, 842 A.2d 207 (N.J.Super. 2004). A

possibility that is so strong that Defendants amended their protocol during this litigation to add a crash cart. Yet, as Dr. Heath explained and Dr. Dershwitz confirmed, the equipment and sections of the protocol dealing with the crash cart are woefully inadequate to explain how to revive a person after the first two chemicals have been administered. Tape 4; 4/20/05; 2:16:00 (Testimony of Dr. Heath); Tape 6; 5/2/05; 11:18:45 (Testimony of Dr. Dershwitz). If properly trained medical personnel - - and a doctor of general medicine or an EMT do not have this training - - has the proper equipment, a condemned inmate could be revived at the execution chamber, even after minutes have gone by since the injection began. Tape 4; 4/20/05; 2:16:00 (Testimony of Dr. Heath). Yet, Defendants leave the responsibility of reviving condemned inmates to a psychiatrist who testified that he has not treated patients in a long time, because his current position is administrative. Tape 3; 4/19/05; 10:21:30 (Testimony of Defendant Haeberlin).

STANDARD OF REVIEW

This lawsuit was brought as a civil action seeking declaratory judgment under Kentucky Rules of Civil Procedure. Thus, Plaintiffs must establish a constitutional violation by a preponderance of the evidence.

ARGUMENT

I. THE CHEMICALS AND PROCEDURES DEFENDANTS USE FOR CARRYING OUT LETHAL INJECTIONS CREATE AN UNNECESSARY RISK OF PAIN AND SUFFERING DURING AN EXECUTION IN VIOLATION OF SECTION 17 OF THE KENTUCKY CONSTITUTION AND THE EIGHTH AMENDMENT TO THE UNITED STATES CONSTITUTION.

Numerous aspects of Defendants' lethal injection procedure do not pass constitutional muster. Here, Plaintiffs first discuss the applicable legal standard. Then, Plaintiffs apply the legal standard to the following issues: 1) the use of pancuronium bromide during an execution; 2) the use of potassium chloride during an execution; 3) the failure to administer an analgesic during an execution by lethal injection; 4) the use of sodium thiopental during an execution; 5) the insertion of a needle in the neck; 6) sticking a condemned inmate with a needle for up to sixty minutes in an attempt to insert an I.V.; and, 7) the lack of monitoring to determine consciousness prior to the injection of pancuronium bromide and potassium chloride.

A. The cruel and unusual punishment standard under section 17 of the Kentucky Constitution and the Eighth Amendment to the United States Constitution

A particular aspect of an execution procedure violates section 17 of the Kentucky Constitution and the Eighth Amendment to the United States Constitution if one of three criteria have been satisfied:[1]

1) the physical pain inflicted during the particular means for carrying out a lethal injection is excessive;

2) the risk of pain caused by the means for carrying out a lethal injection is more than the Constitution tolerates; or,

3) the risk of pain and suffering is unnecessary in light of available alternatives.

1. excessive pain.

A punishment causes excessive pain in violation of the cruel and unusual punishment clause when it involves "something more than the mere extinguishment of life," such as "torture or a lingering death." *In re Kemmler*, 136 U.S. 436, 447 (1890). The degree of suffering not the amount of time a person suffers is the important inquiry. Extreme or torturous pain during moments of consciousness would render an aspect of an execution

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[1] A punishment can also violate the cruel and unusual punishment clause if it violates the evolving standards of decency or if the punishment causes mutilation of the human body.

procedure unnecessarily cruel. *See Fierro v. Gomez*, 865 F.Supp. 1387, 1410 (N.D. Cal. 1994), *remanded on other grounds by. Gomez v. Fierro*, 519 U.S. 918 (1996). Suffering for as little as forty seconds has been considered excessive. *See Palmer v. Clarke*, 293 F.Supp.2d 1011, 1064-66 (D. Neb. 2003) (twenty seconds of suffering constitutes cruel and unusual punishment); *see also*, *Fierro* (stating that *Campbell v. Wood*, 18 F.3d 662, 687 (9th Cir. 1994), suggests that one and a half minutes of suffering constitutes cruel and unusual punishment).

Although excessive pain is often thought of in terms of the level of a pain a person suffers, it is much more than that. It also includes punishments that are "nothing more than the purposeless and needless imposition of pain and suffering," *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 463 (1947), and those that are "totally without penological justifications." *Rhodes v. Chapman*, 452 U.S. 337, 346 (1981) (*quoting Gregg v. Georgia*, 428 U.S. 153,183 (1976)); *Workman v. Commonwealth*, 429 S.W.2d 374, 378 (Ky. App. 1968) (holding that a punishment is cruel and unusual when "it exceeds any legitimate penal aim").

2. risk of pain that is more than the Constitution tolerates.

In capital cases, as in other cases, the teaching of the Supreme Court's cases is that Eighth Amendment adjudication cannot proceed just by correcting ugly but isolated instances of deviation from generally acceptable standards of procedure. Rather, it must be concerned with assuring that procedures are adequately designed and

maintained to avoid undue risks of inflicting inhumane punishments. *Farmer v. Brennan*, 511 U.S. 825, 846 (1994) (acknowledging that the focus of the inquiry is whether there exists an "objectively intolerable risk of harm"); *Helling v. McKinney*, 509 U.S. 25, 33 (1993) (holding that the "Eighth Amendment analysis "requires a court to assess whether society considers the risk that the prisoner complains of" to be more than the Constitution tolerates); *Campbell v. Wood*, 18 F.3d 662, 687 (9th Cir. 1994) (holding that an Eighth Amendment challenge to a method of execution must be considered in terms of the risk of pain). An aspect of an execution procedure that poses too great a risk of pain is unconstitutional whether or not alternatives exist.

3. unnecessary risk of pain and suffering.

The Eighth Amendment to the United States Constitution also "forbids the infliction of unnecessary pain in the execution of the death sentence." *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 463 (1947); *accord Gregg v. Georgia*, 428 U.S. 153, 173 (1976) (holding that the Eighth Amendment prohibits punishments that "involve the unnecessary and wanton infliction of pain. In determining whether a punishment constitutes unnecessary pain or creates an unnecessary risk of pain and suffering, a court must judge the cruelty of the method of execution in light of currently available alternatives. *Workman*, 429 S.W.2d at 378 (a cruel and unusual punishment approach "should always be made in light of developing concepts of elemental decency."). In essence, any risk of pain is unnecessary if a viable

alternative that poses less risk of pain and suffering exists.

B. Defendants use of pancuronium bromide as one of the lethal injection chemicals violates the cruel and unusual punishment clause because it creates an unnecessary risk of pain and suffering and makes it extraordinarily difficult to monitor for conscious paralysis.

The second chemical administered during the lethal injection process, pancuronium bromide, has no effect on pain. *See. e.g.*, Tape 4; 1:55:57; (Testimony of Dr. Heath). Instead, pancuronium bromide is a neuromuscular blocking agent that paralyzes the body and collapses the organs, making it extremely difficult to detect if a person can feel pain. If a person is at a level of consciousness where the person can respond to painful stimuli, the pancuronium bromide masks the extreme pain caused by the potassium chloride and the agony of suffocation resulting from the pancuronium bromide. *Id.*; Tape 5; 11:13:00 (Testimony of Dr. Dershwitz); Tape 3; 10:14:00 (Testimony of Carol Weihrer, describing the conscious paralysis as the "absolute fires of hell").

The agony of suffocation and risk of pain and suffering caused by pancuronium bromide is unnecessary, because potassium chloride will cause death with or without the addition of other chemicals. Tape 4; 4/20/05; 2:03:00 (Testimony of Dr. Heath); Tape 6; 5/2/05; 9:40:28 (Testimony of Dr. Dershwitz). Defendants' argued that pancuronium served the "legitimate" purpose of preventing witnesses from seeing the unpleasant sight of

the condemned inmate suffering convulsions caused by the potassium chloride. Tape 6; 10:23:44 (Testimony of Dr. Dershwitz). But there is nothing legitimate about perpetrating a fraud on the public by creating a false impression that an inmate peacefully "goes to sleep" and never wakes up, when in reality, the potassium chloride is causing convulsions.

Preventing the public from viewing the reactions to the chemicals - - including convulsions and potentially conscious pain and suffering - - is a purpose not recognized or allowed by the Kentucky Constitution or the Eighth Amendment. *See California First Amendment Coalition v. Woodford*, 2000 WL 33173913 (N.D. Cal. July 26, 2000) (recognizing that the public's perception of the amount of suffering endured by the condemned and the duration of the execution is necessary in determining whether a particular execution protocol is acceptable under the cruel and unusual punishment clause).

Using pancuronium bromide also creates an unnecessary risk of conscious pain and suffering because the convulsions could be alleviated by using a different chemical to stop the heart, which also would negate any basis for using pancuronium.

In sum, Defendants' use of pancuronium bromide creates an unnecessary risk of pain and suffering in violation of the cruel and unusual punishment clause for five reasons.

1) pancuronium bromide does not relieve pain;

2) pancuronium bromide causes agony in a person capable of feeling pain (i.e. not in a surgical plane of anesthesia);

3) pancuronium bromide makes it more difficult to monitor for consciousness, and therefore increases the risk that a condemned inmate's consciousness will go undetected;

4) pancuronium bromide is not necessary to cause death, therefore inherently increasing the risk that it causes unnecessary pain and suffering because it could be completely avoided without preventing the execution from being completed; and,

5) preventing convulsions could be accomplished by using a chemical to stop the heart that poses less risk of pain and suffering than potassium chloride.

C. Defendants use of potassium chloride as one of the lethal injection chemicals violates the cruel and unusual punishment clause because it creates an unnecessary risk of pain and suffering in light of readily available alternatives.

Defendants' use of potassium chloride as one of the lethal injection chemicals constitutes cruel and unusual punishment. Potassium chloride, the third and final chemical used in Kentucky lethal injections causes excessive pain in violation of the cruel and unusual punishment clause because it causes an extremely painful burning sensation as the chemical ravages the nervous system and stops the heart from beating. Tape 3; 4/19/05; 11:30:50 (Testimony of Dr. Hiland); Tape 4; 4/20/05; 2:01:29 (Testimony of Dr. Heath); Tape 6; 11:13:55 (Testimony of Dr. Dershwitz). Defendants, however, may

argue that the fact that potassium chloride causes pain is irrelevant because the inmate is unconscious before the potassium of chloride enters the inmate's bloodstream. As discussed in the next section, the evidence presented before this Court shows the exact opposite · · that an intolerable risk exists that an inmate will be conscious or regain conscious during the execution. Nonetheless, establishing that an inmate likely will be conscious when the potassium chloride is injected is not necessary to prevail on this claim, because there is a viable alternative to potassium chloride.

The Eighth Amendment deals with unnecessary risks of pain and suffering in light of available alternatives. Because "many non painful ways of stopping the heart" exist, Tape 4; 4/19/05; 1:46:40 (Testimony of Dr. Heath); *accord*, Tape 6; 11:15:10; (Testimony Dr. Dershwitz), Defendants' use of potassium chloride during a lethal injection constitutes an unnecessary risk of pain and suffering in violation of the cruel and unusual punishment clause regardless of whether or not the inmate is conscious.

D. The failure to administer an analgesic as one of the lethal injection chemicals violates the Eighth Amendment because it creates an unnecessary risk of pain and suffering.

Defendants inject three chemicals into a condemned inmate during a lethal injection:

1) sodium thiopental to render an inmate unconscious purportedly so the inmate does not feel pain;

2) pancuronium bromide to paralyze all voluntary muscles so convulsions are not visible to witnesses; and,

3) potassium chloride to stop the hear from beating.

Analgesics - - which include opiates - - are drugs that relieve pain. During surgery, analgesics are used in conjunction with barbiturates to ensure that the patient does not suffer pain. Tape 6; 5/2/05; 11:24:26 (Testimony of Dr. Dershwitz) (one type of medication used to put someone to sleep during surgery and another chemical used to relieve pain). None of the chemicals used in lethal injections (including thiopental) are analgesics. Thus, Defendants are not giving condemned inmates a pain reliever during their execution. *See* Tape 4; 1:26:50 (Testimony of Dr. Heath, whose major area of research is the mechanisms of pain). The failure to administer a pain reliever during an execution creates an unnecessary risk of pain and suffering, because injecting an analgesic would easily decrease the likelihood that a condemned inmate will feel pain during an execution. *See* Tape 5; 12:25:50 (Testimony of Dr. Watson) (adding analgesic would increase the likelihood that potassium chloride would not be painful).

E. Defendants' use of an ultrashort acting barbiturate that could wear off during an execution and their failure to ensure that they are actually delivering an adequate concentration of thiopental to place a condemned inmate under general anesthesia for the entire execution creates an unnecessary risk of pain and suffering

Instead of injecting a long acting barbiturate to render the condemned inmate unconscious, Defendants inject an ultra-short acting barbiturate (thiopental) that begins to wear off immediately. Because of thiopental's short acting nature, anesthesiologists primarily use thiopental as an introductory anesthetic that is followed up with a longer acting anesthetic that keeps the patient asleep for an entire surgical procedure. Tape 4; 4/20/05; 1:28:16 (Testimony of Dr. Heath). When administered in combination with another anesthetic, approximately 10-12 mg/L of thiopental in the body is necessary to ensure that a person is unable to respond to verbal stimuli. Tape 6; 5/2/05; 11:27:14 (Testimony of Dr. Dershwitz) (saying that 10-12 mg/L level is based on using thiopental in combination with another anesthetic); 10:16:08 (claiming that the accepted definition of consciousness is the ability of a person to respond to a simple command such as raise a leg). However, that number increases both when thiopental is used as the only anesthetic and when attempting to ensure that an unconscious person will not wake up from painful stimuli - - two areas where Defendants' expert, Dr. Dershwitz has little experience. *Id.* at 11:26:00 (admitting that his numbers on thiopental are lower than the 39 mg/L of thiopental specified in Baselt's Disposition of Toxic Drugs and Chemicals in Man

because Baselt's study is based on using thiopental as the only anesthetic while his testimony is based on using thiopental in conjunction with other anesthetics); *accord* Tape 4; 4/20/05; 1:26:30 (Testimony of Dr. Heath); Tape 7; 5/10/05; 9:10:56 (Testimony of Dr. Watson).

Dr. Dershwitz testified that all his calculations concerning consciousness only deal with the amount of thiopental necessary to ensure a lack of response to verbal stimuli, and are based on administering thiopental in conjunction with another anesthetic. Tape 6; 5/2/05; 10:16:08, 11:27:14 (Testimony of Dr. Dershwitz). This is because Dr. Dershwitz rarely relies upon thiopental as the sole medication for surgical procedures, and has not reviewed literature on injecting thiopental as the sole anesthetic. *Id.* at 11:28:58. Surprisingly, he is unfamiliar with the standard text for determining the amount of thiopental necessary to ensure that a person will not respond to painful stimuli, Disposition of Toxic Drugs and Chemicals in Man by Randall Baselt. *Id.* at 11:25:07.

According to Baselt, at least 39 mg/L of thiopental are necessary to induce general anesthesia (level of consciousness necessary to ensure that a person will not respond to painful stimuli). *Id.* at 11:25:57. Michael Ward and Dr. Watson confirmed Baselt when they testified that approximately 35 or 40 mg/L of thiopental are necessary to achieve general anesthesia. Tape 2; 4/18/05; 2:54:50 (Testimony of Michael Ward); Tape 5; 4/21/05; 10:17:30 (Testimony of Dr. Watson).

3 grams of thiopental (the dose Kentucky injects) is not likely to produce 35-40 mg/L of thiopental in the body

for the five minutes that it took Edward Harper to die (some executions last longer). As exhibit 32 shows, Dr. Dershwitz created a graph determining the level of thiopental in the body after 5 minutes. His graph stated that 30.15 mg/L will be in the body after 5 minutes. Tape 6; 5/2/05; 11:40:02. This amount is much lower than the amount necessary to ensure that a person does not feel pain. When confronted with his Maryland data, Dr. Dershwitz claimed that Maryland injected a lower amount of thiopental than Kentucky. *Id.* Yet, that is not the case. Dr. Dershwitz's Maryland affidavit, which is part of exhibit 32, states that Maryland also injects 3 grams of thiopental. *Id.* at 11:41:16. Thus, Defendants' own expert's data shows that, for at least part of the execution, an inmate injected with 3 grams of thiopental likely will be able to feel the excruciating pain and suffering caused by pancuronium bromide and potassium chloride. This pain is intolerable under the cruel and unusual punishment clause. *See Fierro v. Gomez*, 865 F.Supp. 1387, 1410 (N.D. Cal. 1994). Suffering for as little as forty seconds is been considered excessive. *See Palmer v. Clarke*, 293 F.Supp.2d 1011, 1064-66 (D. Neb. 2003) (twenty seconds of suffering constitutes cruel and unusual punishment); *see also*, *Fierro* (stating that *Campbell v. Wood*, 18 F.3d 662, 687 (9th Cir. 1994), suggests that one and a half minutes of suffering constitutes cruel and unusual punishment). Further, the risk that the amount of thiopental injected will not prevent an inmate from feeling painful stimuli is more than the cruel and unusual punishment clause tolerates, particularly since other barbiturates that will last a longer period of time could be used instead of thiopental.

However, even if 3 grams of thiopental could prevent an inmate from feeling painful stimuli, Plaintiffs should prevail on this claim. The evidence from the execution of Edward Harper and condemned inmates in North Carolina and South Carolina proves that there is an unacceptable risk that even 3 grams of thiopental will not reach the condemned inmate's bloodstream. For example, Edward Harper's toxicology results showed 3 mg/L of thiopental in the vena cava and the axilliary vein and 6.5 mg/L of thiopental in the heart, Tape 2; 4/18/05; 2:56:15 (Testimony of Michael Ward) - - levels that troubled Defendants' expert, Dr. Dershwitz. Tape 6; 5/2/05; 11:34:55.

It was reasonable for Dr. Dershwitz to be troubled by the 6.5 mg/L of thiopental found in Harper's heart. Repeatedly, he has submitted affidavits saying that 50% of the population will be conscious when they have 7 mg/L of thiopental in their body, and that the heart blood level is the most reliable indicator of the level of thiopental. *Id.* at 10:21:48; 11:31:13. Yet, Dershwitz testified that Harper was unconscious for the entire duration of his execution. *Id.* at 9:50:23. To explain this inconsistency, Dershwitz claimed, for the first time anywhere, that thiopental levels are only reliable if drawn from the left side of the heart, and said that he never told anyone that before because it was obvious and no one asked. *Id.* at 11:31:32. In saying this, Dr. Dershwitz is inaccurate and testifying beyond the scope of his area of expertise.

Dr. Dershwitz deals with living people not dead people like Michael Ward, Dr. Corey and Dr. Watson do. Although obvious from Dershwitz's field of practice - -

anesthesiology - - this is even more clear after analyzing his testimony, which was based on tests he conducted using chemicals that react differently in the body because of different physiological properties. *Compare* Tape 6; 5/2/05; 12:01:00 (Testimony of Dr. Dershwitz); *with*, Tape 7; 5/10/05; 9:12:10 (Testimony of Dr. Watson). Dershwitz claimed that the heart is the most reliable indicator of the level of thiopental in the body because of the mixing within the body necessary to achieve equilibrium. Tape 6; 5/2/05; 11:35:50. He also claimed that post mortem redistribution does not exist with thiopental. *Id.* Even more remarkable, Dr. Dershwitz claimed that necrokinetics, the scientific term for the movement and concentration of drugs in dead people over time, does not exist. *Id.* at 10:03:53. All of this evidence was discredited by doctors who specialize in analyzing blood concentrations of chemicals in dead people.

Dr. Corey and Dr. Watson - - who, unlike Dershwitz, has published an abstract on post mortem redistribution of thiopental, Tape 7; 5/10/05; 9:17:00 - - testified that post mortem redistribution occurs with thiopental - - a fact that Dershwitz would have known if he was familiar with the standard reference for determining the movement of chemicals in the human body. Tape 2; 4/18/05; 2:23:33 (Testimony of Dr. Corey); Tape 5; 4/21/05; 10:20:20 (Testimony of Dr. Watson). According to both Dr. Corey and Dr. Watson, post mortem redistribution causes levels of thiopental in the heart to be higher than the concentration at death. *Id.* It is for that reason that both of them testified that venous blood is the most reliable indicator of thiopental in the body. *Id.* Further, Dr. Watson, the only witness who has studied

the movement of thiopental after death, explained that after 14 hours, the level of thiopental in venous blood is about the same as it was at death. Tape 5; 4/21/05; 10:34:50. Thus, according to Dr. Corey, Michael Ward, and Dr. Watson, the level of thiopental found in Edward Harper's venous blood after death is a reliable indicator of the level of thiopental in his body at the time of death. Tape 2; 4/18/05; 2:41:08 (Testimony of Dr. Corey); Tape 2; 4/18/05; 2:57:32 (Testimony of Michael Ward); Tape 5; 4/21/05; 10:47:14 (Testimony of Dr. Watson).

Although allegedly injected with 2 grams of thiopental, Harper only had 3 mg/L of thiopental in his venous blood at the time of the autopsy, fourteen hours after death. Tape 2; 4/18/05; 2:56:15 (Testimony of Michael Ward). As both Michael Ward and Dr. Watson testified, a person with 3 mg/L of thiopental can feel painful stimuli. *Id.* at 2:56:00; Tape 5; 4/21/05; 10:17:30 (Testimony of Dr. Watson). Thus, Harper was able to feel the excruciating pain of pancuronium bromide and potassium chloride ravaging his system.

Defendants, however, have increased the amount of thiopental from 2 to 3 grams. According to Dr. Watson, this change is negligible, because the thiopental concentrations in Harper show that a one gram increase of thiopental will not fix whatever is currently wrong with Kentucky's lethal injection protocol. Tape 5; 4/21/05; 11:44:42. In fact, unless other major changes to the protocol occur, Dr. Watson predicts that the level of thiopental in a person injected with 3 grams of thiopental will be only a small amount more than would be found in a person injected with two grams. *Id.* Thus, if

Defendants use the current protocol to inject 3 grams of thiopental, Plaintiffs will still not receive enough thiopental in their body to achieve general anesthesia, and thus will be able to feel pain.

The likelihood of this is increased by Defendants' failure to specify the concentration of thiopental being administered. If too low a concentration of thiopental is injected, it will take longer to get the three grams of thiopental into the body. Tape 4; 4/20/05; 2:47:00 (Testimony of Dr. Heath). Because of the increase in time, more of the thiopental will have worn off before the pancuronium bromide and potassium chloride is injected. Perhaps this is why Harper did not receive enough thiopental. But, Plaintiffs do not have the burden of explaining why condemned inmates are not receiving enough thiopental to prevent them from feeling painful stimuli. Plaintiffs only have to establish, by a preponderance of the evidence, that the chemicals Defendants' use during lethal injections pose an unnecessary risk of pain and suffering. The concentration of thiopental found in Harper's blood after death along with the similar data collected in North Carolina and South Carolina demonstrate this. It shows that Defendants have not and are not addressing and eliminating the risk that condemned inmates are feeling pain during their execution. The risk that this will occur during Plaintiffs' execution is more than the Eighth Amendment tolerates, particularly since the risk could be lessened by the use of a different chemical combination.

F. Inserting a needle into a condemned inmate's neck could cause an inmate to bleed to death, thereby creating a risk of pain and suffering that is more than the Eighth Amendment tolerates.

The cruel and unusual punishment clause bars anything that is "more than the mere extinguishment of life, such as "torture" or a "lingering death," *In re Kemmler*, 136 U.S. 436, 447 (1890), and any aspect of a punishment that creates an "objectively intolerable risk of harm." *Helling v. McKinney*, 509 U.S. 25, 33 (1993). Inserting an I.V. into Plaintiffs' neck will cause torture, a lingering death, or an objectively intolerable risk of pain.

Inserting a needle into the neck is a dangerous procedure that should only be done in emergencies. Tape 5; 4/21/05; 1:58:30 (Testimony of Department of Corrections' Dr. Rizalino Rafi). Dr. Rafi would never insert an I..V. in the neck, partly because it could result in complications that would make it difficult to breath, *Id.* at 1:49:00, causing extreme pain and suffering. Yet, Defendants may insert an I.V. into Ralph Baze or Thomas Bowling's neck during their execution.

The trial testimony showed that Defendants have no idea what they are doing when it comes to inserting an I.V. into the neck. Some witnesses testified that if an I.V. is going to be inserted into the neck, it would be inserted into the carotid artery while others testified that the I.V. would be inserted into the jugular vein. *Compare* Tape 2; 4/18/05; 10:15:17 (Testimony of Defendant Haeberlin on inserting I.V. into carotid artery); *with*: Tape 5; 4/21/05;

1:58:45 (Testimony of Department of Corrections' Dr. Rizalino Rafi).

Placing a needle in the carotid artery or the jugular vein is constitutionally intolerable. An I.V. in the carotid artery would cause excessive bleeding, possibly causing a person to bleed to death. Because of this risk, Dr. Hiland, Dr. Haas, Nurse Wood, and Dr. Rafi, would never insert an I.V. into the carotid artery. Tape 3; 4/19/05; 11:47:08, 12:14:50; Tape 4; 4/20/05; 10:05:53, Tape 5; 4/21/05; 1:48:00. Neither should defendants. The objectionably unreasonable risk of pain or a lingering death from excessive bleeding caused by inserting an I.V. in the carotid artery violates the cruel and unusual punishment clause of the Eigth Amendment.

Putting a needle in the jugular vein is not any better. The insertion process is similar to starting a central line, which this Court has already prohibited. A central line involves an incision into the body and threading a catheter to the heart. With the jugular vein, a two inch incision must be placed into a conscious individual. Tape 6; 5/2/05; 11:17:11 (Testimony of Dr. Dershwitz). Cutting two inches into the body of a conscious person able to feel pain constitutes the unnecessary infliction of pain, in violation of the cruel and unusual punishment clause.

G. Spending up to 60 minutes attempting to insert an I.V. violates the cruel and unusual punishment clause because it is nothing more than the needless imposition of pain and suffering.

When this Court prohibited the use of a cut-down procedure, Defendant Rees, who has no medical training, unilaterally ordered that the execution team must spend sixty minutes attempting to insert an I.V. before the team can make the decision that an I.V. cannot be started without additional medical intervention. Tape 2; 4/18/05; 3:12:00 (Testimony of Defendant Rees). Defendant Rees' order was adopted without any consultation with any medical professionals. *Id.*

The only testimony on attempting to insert an I.V. for up to 60 minutes came from Dr. Heath, who testified that 60 minutes of sticking a person with a needle is useless and extremely painful. He said that it should only take two to three minutes to insert an I.V. Tape 4; 4/20/05; 2:48:18 (Testimony of Dr. Heath). After ten minutes, someone else should try to insert the I.V. *Id.*; *see also*, Tape 3; 4/19/05; 11:58:03 (Testimony of Department of Corrections' Nurse Chanin Hiland) (after making three attempts to insert an I.V. into a vein, she would ask someone else to try). After 20 minutes of attempting to insert an I.V., the execution team will have exhausted all available locations to insert a needle. Tape 4; 4/20/05; 2:48:18 (Testimony of Dr. Heath). Thus, attempting to insert a needle for more than twenty minutes is useless as there is little to no chance that the execution team will be able to insert an I.V. after that point. Further, for up to

forty minutes, the execution team is needlessly inflicting pain in violation of the cruel and unusual punishment clause. *See Resweber*, 329 U.S. at 463.

Yet, the cruel and unusual punishment clause is violated even before the execution team spends twenty minutes attempting to insert an I.V. It should only take two to three minutes to insert an I.V. Tape 4; 4/20/05; 2:48:18 (Testimony of Dr. Heath). Well before the twenty minutes has elapsed, the condemned inmate will be in "a lot of pain and discomfort." *Id.* at 2:48:28. Thus, the portion of Defendants' execution protocol requiring the execution team to spend 60 minutes attempting to insert an I.V. constitutes torture in violation of the cruel and unusual punishment clause. *See Kemmler*, 136 U.S. at 447; *Palmer*, 293 F.Supp.2d at 1064-66 (twenty seconds of pain and suffering constitutes cruel and unusual punishment).

H. The lack of monitoring to ensure that a condemned inmate is unconscious from the time period just prior to injecting pancuronium until death creates an unnecessary risk of pain and suffering in violation of the cruel and unusual punishment clause.

An individual injected with sodium thiopental is capable of feeling pain if the level of thiopental in the body is below the amount necessary to maintain general anesthesia. Normally, this would be easy to detect since people react to pain by moving or crying out. But, as previously discussed, the second chemical administered during lethal injections, pancuronium bromide paralyzes

all voluntary muscles. Nonetheless, there are ways to monitor for consciousness during an execution.

The easiest and most obvious way to ensure that a condemned inmate is unconscious during an execution is to check for consciousness prior to injecting pancuronium bromide. This can be accomplished by checking the corneal reflexes, or pinching a person to see if the person responds. None of these tests work once a person has been injected with a paralytic agent, such as pancuronium bromide.

Yet, monitoring for consciousness still could be done through the use of proper equipment. The following equipment would aid in monitoring consciousness after pancuronium bromide has been injected: a BIS monitor; blood pressure monitoring; EKG machine (if located in the execution chamber and being read throughout the execution not just to determine death); and an EEG monitor. Tape 4; 4/20/05; 1:39:00 (Testimony of Dr. Heath). Defendants use none of this equipment to monitor for consciousness.

Instead, they claim that monitoring for consciousness is not necessary because the inmate "goes to sleep" once the first chemical injected. However, the injection of pancuronium bromide prevents anyone from knowing if that is really the case. Defendants also fail to recognize that an unconscious person could regain consciousness before the execution is over. Thus, it is essential to monitor for consciousness before and after the injection of pancuronium bromide. Defendants' failure to monitor for consciousness creates a risk of pain and

suffering that is completely unnecessary, because it could be alleviated by proper monitoring by adequately trained personnel.

II. IF A STAY OF EXECUTION OCCURS AFTER THE FIRST CHEMICAL IS ADMINISTERED, DEFENDANTS HAVE AN AFFIRMATIVE DUTY TO RENDER ADEQUATE MEDICAL CARE TO REVERSE THE EFFECTS OF THE CHEMICALS. DECLARATORY JUDGMENT SHOULD ISSUE UNTIL DEFENDANTS OBTAIN THE NECESSARY EQUIPMENT TO MAINTAIN LIFE AFTER THE FIRST TWO CHEMICALS HAVE BEEN ADMINISTERED, AND UNTIL DEFENDANTS DESIGNATE A DOCTOR TRAINED IN USING THIS EQUIPMENT TO PERFORM LIFE SAVING MEASURES IF NECESSARY.

Once a stay of execution is granted, the execution is no longer sanctioned. This is true even if the stay is granted after the first chemical is administered. *See In the Matter of Readoption with Amendments of Death Penalty Regulations*, 842 A.2d 207, 211 (N.J.Super. 2004). Thus, the stay creates an affirmative obligation under contemporary standards of decency and morality to take measures to give the inmate a chance to continue living. *See In the Matter of Readoption with Amendments of Death Penalty Regulations*, 842 A.2d at 211.

If the proper equipment is on hand, medical personnel certified in cardiac life support - - not EMT's, phlebotomists, pyschiatrists, or doctors of general

medicine · · would have relatively little difficulty maintaining life after the first two chemicals have been injected. Tape 4: 4/20/05; 2:16:40 (Testimony of Dr. Heath). Because the effects of sodium thiopental and pancuronium bromide are reversible, Tape 2; 4/18/05; 12:16:44 (Testimony of Dr. Haas); Tape 4; 4/20/05; 2:15:18 (Testimony of Dr. Heath), Defendants' failure to have the necessary equipment and adequately trained personnel to reverse the effects of these chemicals violates due process and fundamental fairness. *Id.*

After litigation began, Defendants took some steps to prepare for the need to reverse the effects of the lethal injection chemicals. They added a crash cart. That step, however, is wholly inadequate to maintain the life of the condemned inmate after the first two chemicals have been administered. A crash cart is only as good as the equipment on the crash cart and the medical training of the people operating that equipment.

As Dr. Heath and Dr. Dershwitz testified, the document prepared by Defendants' does not come close to being comprehensive enough for someone to use in maintaining life after the first two chemicals have been injected. Tape 4; 4/20/05; 2:24:10 (Testimony of Dr. Heath); Tape 6; 5/02/05; 11:19:24 (Testimony of Dr. Dershwitz). After questioning about a crash cart began, Defendants produced an inventory of the items on the crash cart, which Defendants' own expert, Dr. Dershwitz, admitted would be insufficient to maintain life after the first two chemicals were injected. According to Dr. Dershwitz, the following medications would be essential: medications to increase blood pressure and contract the

heart; insulin; neostigmine; and artificial ventilation. Tape 6; 11:19:24 (Testimony of Dr. Dershwitz). None of these medications are part of Defendants' crash cart. *Id.*

Defendants seem to see their obligation of maintaining life if a stay is entered prior to the injection of potassium chloride as a joke, stating that it is as likely as a plane crashing into the Kentucky State Penitentiary. Instead of having a medical professional trained in cardiac life support ready to render emergency first aid, they have delegated the life saving duties to a psychiatrist who has not treated patients in a relatively long time. Tape 2; 4/18/05; 10:21:30 (Testimony of Defendant Haeberlin); Tape 2: 4/18/05; 12:13:30 (Testimony of Dr. Haas).

Even worse, Defendants do not think addressing this issue is worth their time. Defendants objected to the entire line of questioning about whether they had adequate equipment or personnel on hand to render life saving treatment if a stay was obtained after the lethal injection began. Defendants' reasoning was that the likelihood of this occurring was so remote that it is as likely as a plane crashing into the Kentucky State Penitentiary during an execution. Tape 2: 4/18/05; 2:20:50 (Objection by defense counsel).

Although, "the grant of a stay of execution communicated to prison authorities after the lethal injection has been administered is not a likely event, it can happen," *In the Matter of Readoption with Amendments of Death Penalty Regulations*, 842 A.2d at 211, and has happened. Dr. Heath testified about two

cases that he is aware of where this happened. Tape 4; 4/18/05; 4:02:36 (Testimony of Dr. Heath). Thus, as Defendants' recognized by adding a crash cart to its lethal injection protocol, "it is a foreseeable occurrence. And should it occur, there can be no justification for depriving that inmate a chance at life." *Id.* A matter of minutes may separate the state of being sedated, close to dead, and dead. Prompt medical attention is necessary to maintain life. Defendants not only are currently unwilling to allow a properly trained physician to perform life saving measures, but they also do not have the necessary equipment nearby for a physician to use in attempting to save a life.

Although Defendants have referred to Ralph Baze and Thomas Bowling as "animals" during this litigation, they remain human beings. If a stay is granted after the lethal injection process begins · · the condemned inmate has a constitutionally protected right to maintain life. Defendants' failure (and seeming refusal) to take reasonable steps to preserve a condemned inmate's life if stay is granted after the lethal injection process violates due process, fundamental fairness, and the basic respect for human dignity underlying the Eigth Amendment to the United States Constitution.

III. DEFENDANTS' DELIBERATE INDIFFERENCE TO THE RISK OF PAIN AND SUFFERING DURING AN EXECUTION, PARTICULARLY IN LIGHT OF AVAILABLE ALTERNATIVES AND PRECAUTIONS THAT LESSEN THE RISK OF PAIN AND SUFFERING, VIOLATES THE EIGHT AMENDMENT PROHIBITION OF CRUEL AND UNUSUAL PUNISHMENT.

"[D]eliberate indifference to serious medical needs of prisoners [also] constitutes the unnecessary and wanton infliction of pain, proscribed by the Eighth Amendment." *Gamble*, 429 U.S. 97, 104 (1976). "Deliberate indifference" means "the official was subjectively aware of the risk." *Farmer v. Brennan*, 511 U.S. 825, 828-29 (1994). Therefore, "[i]n order to state a cognizable claim, a [plaintiff] must allege acts or omissions sufficiently harmful to evidence deliberate indifference to serious medical needs," *Gamble*, 429 U.S. at 106, by establishing that "the official knows of and disregards an excessive risk to inmate health or safety." *Farmer*, 511 U.S. at 837. Defendants have been made aware of the unnecessary risk of pain and suffering caused by their execution protocols and the chemicals they use. Instead of dealing with the issue, Defendants chose to remain willfully blind · · making haphazard changes to the protocol that were based on attempts to avoid liability, rather than medical consultations. Tape 6; 5/2/05; 12:08:00 (Testimony of Defendant Rees).

As Commissioner of the Department of Corrections, Defendant Rees has oversight authority over how lethal injections are carried out in Kentucky. Defendant Rees

also was involved in adopting the first lethal injection protocol in the country. Tape 2; 4/18/05; 3:08:40 (Testimony of Defendant Rees). No medical or scientific tests were conducted on the effects of these chemicals used individually or in combination. Tape 1; 4/18/05; 10:06:28 (Testimony of Prof. Deborah Denno). Defendant Rees was involved in drafting a chemical cocktail that was flawed – it referred to potassium chloride as a paralytic agent. Tape 2; 4/18/05; 3:07:40 (Testimony of Defendant Rees). Other states looked at the Oklahoma protocol, noticed that it mentioned sodium thiopental, a paralytic agent, and potassium chloride, and blindly decided that they needed to use those three chemicals for lethal injections. Tape 1; 4/18/05; 10:10:49 (Testimony of Prof. Deborah Denno). Kentucky was no different.

In 1998, Warden Parker decided what chemicals to use for Kentucky lethal injections and what amount to administer. Tape 2; 4/18/05; 2:07:50 (Testimony of Phil Parker). He based his decision on what other states used, and believed that all other states used the same chemicals. *Id.* He never consulted an anesthesiologist or any other medical personnel to determine whether the chemicals he chose would serve its intended purpose, whether alternative chemicals existed, or even to find out if other chemicals existed that would pose less risk of pain and suffering. *Id.* Instead, he blindly chose sodium thiopental, pancuronium bromide, and potassium chloride, solely because Oklahoma did something like that twenty years earlier and other states did the same.

More than nine months ago, Defendants were put on notice that

- the chemicals they use in lethal injections are problematic;

- that other states use different chemicals;

- that a person could be paralyzed but consciously feeling the pain of the lethal injection chemicals;

- that life can be maintained after the first two chemicals have been administered;

- and that there are ways to monitor for conscious paralysis and to lessen the risk that conscious paralysis would occur.

See Complaint and Memorandum of Law on Lethal Injection. Defendants could have looked into these issues, conducted research, and taken steps to lessen the risk of pain and suffering caused by their execution procedures and chemicals. Instead, they chose to be deliberately indifferent to the risk and to remain willfully blind of any information unfavorable to their cause.

As discussed earlier, Defendants Rees and Haeberlin made changes to Kentucky's lethal injection procedure during the litigation without consulting any medical personnel familiar with the effects of the lethal injection chemicals or inserting I.V.'s. Tape 2; 4/18/05; 3:11:55 (Testimony of Defendant Rees); Tape 3; 4/19/05; 10:02:20 (Testimony of Defendant Haeberlin). Yet, the changes never addressed the concerns mentioned above. Further, since 27 other states use the same chemicals

during lethal injections, Defendants saw no reason to learn why sodium, thiopental, pancuronium bromide, and potassium chloride, are used in lethal injections. Tape 2; 4/18/05; 3:13:30 (Testimony of Defendant Rees); Tape 2; 4/18/05; 10:35:40 (Testimony of Defendant Haeberlin). This was despite Defendants being informed during this lawsuit that New Jersey does not use a paralytic agent. *See Motion for Temporary Injunction.* Defendants chose not to look at New Jersey's lethal injection protocol, and then testified at trial that they were not aware that New Jersey does not use a paralytic agent. *Id.* Defendants' failure to consider using other chemicals after being informed that alternative chemical combinations that pose less risk of pain and suffering may exist constitutes deliberate indifference in violation of the Eighth Amendment.

The failure to consider alternative chemicals is not the only instance of Defendants' deliberate indifference to the issues raised in this lawsuit. Defendants' gave a psychiatrist the duty to perform life saving medical treatment if a last minute stay of execution is granted. Having a psychiatrist perform that function · · rather than a medical professional trained in cardiac life support and the use of a crash cart · · constitutes deliberate indifference towards the medical needs of the condemned inmate, and a lack of concern for the gravity of the situation.

Finally, through this lawsuit, Defendants were made aware of the possibility of conscious paralysis during an execution. Their own expert testified that conscious paralysis is a "real problem." Tape 6; 5/02/05;

10:10:45 (Testimony of Dr. Dershwitz). Yet, neither of the two people in the execution chamber with the condemned inmate during an execution know how to monitor for conscious paralysis. Deputy Warden Richard Pershing testified that he has "no knowledge of anesthesia awareness." Tape 3; 4/19/05; 11:22:20. Defendant Haeberlin testified that he "doesn't know what to look for to see if person is consciously paralyzed." Tape 3; 4/19/05; 10:13:00. Defendant Haeberlin's failure to find out how to monitor for conscious paralysis and to attempt to implement techniques and/or equipment for monitoring evinces Defendants' deliberate indifference towards the risk of pain and suffering during an execution.

IV. THE FAILURE TO PROVIDE A CONTINUOUS ADMINISTRATION OF THE LETHAL INJECTION CHEMICALS VIOLATES K.R.S. 431.220.

As alleged in Paragraphs 5 and 12 of Plaintiffs' Complaint for Declaratory Judgment, Defendants' current lethal injection procedure violates KRS § 431.220 because Kentucky's execution protocol does not conform with 431.220's requirement of a "continuous administration" of all the chemicals, particularly including the chemical intended to function as an anesthetic. Under § 431.220, "every death sentence shall be executed by continuous intravenous injection of a substance or combination of substances sufficient to cause death." Under this language, a lethal injection must consist either of a continuous injection of a single drug, or a continuous injection of a combination of chemicals sufficient to cause

death, presumably in a manner also consistent with the state and federal Constitutions.

Kentucky's protocol complies with neither of the two acceptable statutory alternatives. Therefore, Plaintiffs are entitled to an order declaring that Kentucky's current protocol for lethal injection violates KRS § 431.220, because sodium thiopental –along with the other chemicals—is not administered "continuously."

Proof at the hearing before this court has established that sodium thiopental is not administered continuously, but rather is administered in a single dose at the outset of the lethal injection process. This is plain from the protocol itself, and was confirmed by virtually every witness who spoke on the subject. After the sodium thiopental is injected, there are separate injections of saline solution, then pancuronium bromide, then saline solution, then potassium chloride, and, finally, saline solution (added to the protocol after the hearing by amendment in May 2005). The protocol does not direct the IV team to administer the chemicals "continuously." Instead, the protocol directs that the drugs be administered one at a time.

According to the proof at the hearing, sodium thiopental is an ultra-short acting anesthetic that starts wearing off immediately, creating an unacceptable risk that the condemned prisoner will awaken prior to death, to experience the agony of conscious paralysis and the searing pain of potassium chloride. Thus in addition to constituting a statutory violation of KRS 431.200's "continuous" requirement, the failure to administer the

chemicals - - particularly sodium thiopental-- continuously also constitutes cruel and unusual punishment in violation of § 17 of the Kentucky Constitution and the 8th Amendment of the United States Constitution.

CONCLUSION AND REQUEST FOR RELIEF

The chemicals and procedures Defendants use for carrying out executions in Kentucky violate the prohibition of cruel and unusual punishment under section 17 of the Kentucky Constitution and the Eighth Amendment to the United States Constitution for any one of three reasons:

1) the chemicals and procedures cause a level of pain that is more than the Constitution tolerates;

2) the chemicals and procedures cause a risk of pain that is more than the Constitution tolerates; and,

3) the risk of pain and suffering caused by the chemicals and procedures is unnecessary because readily available alternatives exist that pose less risk of pain and suffering.

Thus, Plaintiffs respectfully request that this Court hold that the chemicals Defendants use in Kentucky lethal injections and the procedures (or lack thereof) violate the cruel and unusual punishment clause. Specifically, Plaintiffs request that this Court issue a declaratory judgment that Defendants' lethal injection procedures violate the cruel and unusual punishment because they:

1) use pancuronium bromide during an execution;

2) use potassium chloride during an execution;

3) fail to administer an analgesic;

4) use an ultrashort acting barbiturate;

5) fail to ensure that they are delivering an adequate concentration of thiopental to the condemned inmate;

6) fail to specify the concentration of thiopental being administered;

7) may insert a needle into a condemned inmate's neck;

8) will spend up to 60 minutes attempting to insert an I.V.;

9) fail to monitor for anesthesia awareness before the pancuronium bromide is administered;

10) fail to monitor for anesthesia awareness after pancuronium bromide is administered;

11) do not have on hand the proper equipment for monitoring for anesthesia awareness;

12) do not have the proper equipment to maintain life if a stay of execution is granted after the first or second chemical has been administered; and,

13) leave the responsibility for maintaining life after a stay of execution is granted to a psychiatrist.

Plaintiffs also request a declaratory judgment because Defendants are violating K.R.S. 431.220 by not

providing a continuous administration of the lethal injection chemicals, and because Defendants are deliberately indifferent to the risk of pain and suffering during a lethal injection.

RESPECTFULLY SUBMITTED,

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May 20, 2005

COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
CIVIL ACTION NO. 04-CI-01094

RALPH BAZE AND
THOMAS C. BOWLING — PLAINTIFFS

DEFENDANTS' LETHAL INJECTION BRIEF

JOHN D. REES, COMMISSIONER
KENTUCKY DEPARTMENT OF CORRECTIONS;
GLENN HAEBERLIN, WARDEN KENTUCKY
STATE PENITENTIARY; AND
HON. ERNIE FLETCHER, GOVERNOR
OF KENTUCKY — DEFENDANTS

Plaintiffs seek to prevent the Defendants from executing him in accordance with the Kentucky's lethal injection protocol, arguing that such an execution would violate their right to be free from cruel and unusual punishment. They failed to satisfy their burden of proof.

Bowling and Haze allege but they have not demonstrated that Kentucky's lethal injection methodology creates an unreasonable and medically unacceptable risk of subjecting them to excruciating pain and suffering and a protracted death. They express fear of (1) the pain resulting from the injections of pancuronium bromide and potassium chloride, (2) the risk of inadequate sedation, (3) the protocol's lack of detailed procedures, and (4) the risk of error inherent in the protocol. Through

depositions and evidence presented at trial, they have not established that any of those concerns are based in fact. All they offered was speculation.

PLAINTIFFS' WAIVED THEIR CONSTITUTIONAL CHALLENGE BY ELECTING BY DEFAULT LETHAL INJECTION

Bowling and Baze have waived any objection to or complain about the general method of his execution by lethal injection[1] because they have by default selected that method over the constitutional alternative of electrocution.[2] KRS § 431.220 allows Baze and Bowling the choice to elect either electrocution or lethal injection as the method of execution and if they refuse to elect the statutory default provision applies.

As stated in paragraph 149 of their Amended Complaint, Bowling and Baze refuse to elect a

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[1] *See Stewart v. LaGrand*, 526 U.S. 115, 119, 119 S.Ct. 1018, 143 L.Ed.2d 196 (1999); *Reid v. Johnson*, 333 F.Supp.2d 543, 552 (E.D.Va. 2004); *Orbe v. Johnson*, 267 Va. 568, 570-571, 601 S.E.2d 543, 546 (Va. 2004).

[2] The Supreme Court of Kentucky upheld the constitutionality of electrocution as the means of capital punishment. *McQueen v. Parker*, 950 S.W.2d 226 (Ky. 1997); *Foley v. Commonwealth*, 942 S.W.2d 876 (Ky. 1996); *Bowling v. Commonwealth*, 942 S.W.2d 293 (Ky. 1997); *Perdue v. Commonwealth*, 916 S.W.2d 148 (Ky. 1995); *Bowling v. Commonwealth*, 873 S.W.2d 175 (Ky. 1993); *Sanders v. Commonwealth*, 801 S.W.2d 665 (Ky. 1990); and *Smith v. Commonwealth*, 734 S.W.2d 137 (Ky. 1987). The United States Supreme Court upheld the constitutionality of electrocution as the means of capital punishment. *In re Kemmler*, 136 U.S. 436, 10 S.Ct. 930, 34 L.Ed. 519 (1890).

method of execution, thereby, by default have selected lethal injection over the alternative of electrocution.[3] Constitutional rights, including the right to be free from cruel and unusual punishment, may be waived.[4] There is no need to address the merits of Plaintiffs' waived claim.

KENTUCKY'S LETHAL INJECTION METHODOLOGY IS CONSTITUTIONAL.

The Supreme Court of Connecticut, relying on *Weems v. United States*[5] has prescribed four considerations in addressing the constitutionality of a particular method of execution: (1) contemporary norms and societal standards, (2) dignity of the prisoner and of society, (3) whether pain is gratuitously inflicted, and (4) any psychological suffering.[6]

The Eighth Amendment proscribes "punishments which are incompatible with 'the evolving standards of decency that mark the progress of a maturing society.'"[7] Punishments are incompatibly cruel if

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[3] *See LaGrand, supra*; *Orbe*, 267 Va. 568, 570-71, 601 S.E.2d 546.

[4] *See LaGrand*, 526 U.S. at 119 (concluding the defendant waived his right to complain the gas chamber was cruel and unusual where he elected that method over Arizona's default election of death by lethal injection); *see also Rhoades v. State*, 934 S.W.2d 113, 120 (Tex.Crim.App. 1996).

[5] 217 U.S. 349 (1910).

[6] *See State v. Webb*, 750 A.2d 448, 454 (Conn. 2000).

[7] *See Estelle v. Gamble*, 429 U.S. 97, 102, 97 S.Ct. 285, 290, 50 L.Ed.2d 251 (1976), *quoting Trop v. Dulles*, 356 U.S. 86, 101, 78

they involve "torture or a lingering death,"[8] or "involve the unnecessary and wanton infliction of pain."[9] The determination of whether a punishment violates these principles "should be informed by objective factors to the maximum possible extent."[10] One of the most important objective factors is the contemporary emerging legislative trends throughout the nation.[11]

Every court to examine lethal injection has affirmed its constitutionality.[12] To prevail on this claim that

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S.Ct. 590, 598, 2 L.Ed.2d 630 (1958).

[8] *See In re Kemmler*, 136 U.S. 436, 447, 10 S.Ct. 930, 933, 34 L.Ed. 519 (1890).

[9] *See Gregg v. Georgia*, 428 U.S. 153, 173, 96 S.Ct. 2909, 2925, 49 L.Ed.2d 859 (1976).

[10] *See Coker v. Georgia*, 433 U.S. 584, 592, 97 S.Ct. 2861, 2866, 53 L.Ed.2d 982 (1977).

[11] *See Enmund v. Florida*, 458 U.S. 782, 788-90, 102 S.Ct. 3368, 3371-73, 73 L.Ed.2d 1140 (1982).

[12] *See Kelly v. Lynaugh*, 862 F.2d 1126, 1135 (5th Cir. 1988), *cert. denied*, 492 U.S. 925, 109 S.Ct. 3263, 106 L.Ed.2d 608 (1989); *Woolls v. McCotter*, 798 F.2d 695, 698 (5th Cir. 1986), *cert. denied*, 478 U.S. 1031, 107 S.Ct. 15, 92 L.Ed.2d 769 (1986); *Hill v. Lockhart*, 791 F.Supp. 1388, 1391 (E.D.Ark. 1992) (holding that lethal injection is "the most humane type of execution available"); *Felder v. Estelle*, 588 F.Supp. 664, 671 (S.D.Tex. 1984); *State v. Hinchey*, 890 P.2d 602, 610 (1995); *State v. Deputy*, 644 A.2d 411, 421 (Del.Super. 1994); *Hopkinson v. State*, 798 P.2d 1186, 1187 (Wyo. 1990); *State v. Moen*, 309 Or. 45, 786 P.2d 111, 113 (1990); *People v. Stewart*, 123 Ill.2d 368, 123 Ill.Dec. 927, 935, 528 N.E.2d 631, 639 (1988), *cert. denied*, 489 U.S. 1072, 109 S.Ct. 1356, 103 L.Ed.2d 821 (1989); *Poland v. Stewart*, 117 F.3d 1094, 1104-05 (9th Cir. 1997), cert. denied, 523 U.S. 1082, 118 S.Ct. 1533, 140 L.Ed.2d 683 (1998); *State v. Webb*, 252 Conn. 128, 750 A.2d 448, 458

lethal injection amounts to cruel and unusual punishment, plaintiffs must demonstrate that it is "either incompatible with the evolving standards of decency that mark the progress of a maturing society" or that it involves the "unnecessary and wanton infliction of pain."[13] Plaintiffs have demonstrated neither to this Court.

While thirty-seven states and the federal government authorize lethal injection as a means of execution, no state's method of lethal injection has been found to be unconstitutional.[14] Indeed, lethal injection protocols using the same drugs challenged here repeatedly have been found constitutional.[15]

"The basic concept underlying the Eighth Amendment is nothing less than the dignity of man"; the Amendment "must draw its meaning from the evolving standards of decency that mark the progress of a maturing society."[16] An Eighth Amendment analysis also presumes that the state

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(Conn.), cert. denied, 531 U.S. 835, 121 S.Ct. 93, 148 L.Ed.2d 53 (2000); and *State v. Hinchey*, 181 Ariz. 307, 890 P.2d 602, 610 (Ariz.), cert. denied, 516 U.S. 993, 116 S.Ct. 528, 133 L.Ed.2d 431 (1995); *State v. Carter*, 89 Ohio St.3d 593, 608, 734 N.E.2d 345 (2000); *LaGrand v. Stewart*, 133 F.3d 1253, 1265 (9th Cir.1998).

[13] *See Gray v. Lucas*, 710 F.2d 1048, 1058 (5th Cir. 1983).

[14] *See Cooper v. Rimmer*, 379 F.3d 1029, 1030 (9th Cir.2004).

[15] *See Reid v. Johnson*, 333 F.Supp.2d 543 (E.D.Va. 2004); *Webb*, *supra*; *Sims v. State*, 754 So.2d 657 (Fla. 2000).

[16] *See Trop v. Dulles*, 356 U.S. 86, 100-101, 78 S.Ct. 590, 598-599, 2 L.Ed.2d 630 (1958) (plurality opinion).

official will act "in a careful and humane manner" during an execution.[17]

The standard for establishing whether a particular action constitutes cruel and unusual punishment in violation of the Eighth Amendment to the United States Constitution was set forth succinctly in *Estelle v. Gamble:*

> [T]he [Eighth] Amendment proscribes more than physically barbarous punishments.... The Amendment embodies broad and idealistic concepts of dignity, civilized standards, humanity, and decency ... against which we must evaluate penal measures. Thus, we have held repugnant to the Eighth Amendment punishments which are incompatible with the evolving standards of a maturing society, ... or which involve unnecessary and wanton infliction of pain.[18]

Kentucky's methodology comports with contemporary nouns and standards of society. Baze and Bowling are unable to show that it does not. Determining whether the mode of punishment conforms to contemporary norms and standards of decency is perhaps the most critical factor in the

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[17] *See Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 464, 67 S.Ct. 374, 91 L.Ed. 422 (1947).

[18] 429 U.S. 97, 102-03, 97 S.Ct. 285, 290, 50 L.Ed.2d 251 (1976).

analysis.[19] The courts have guidance when applying the constitutional prohibitions against cruel and unusual punishments. The application has been limited to those practices that are contrary to the "evolving standards of decency that mark the progress of a maturing society."[20] Those standards should reflect the contemporary values and standards of decency of the American society as a whole.[21] It is the courts' job to identify those standards, not to determine what they ought to be.[22] The Court should not entertain plaintiffs' contention that other drugs are available and should be used.

It bears repeating that the States are not required to select the least severe means or methodology of execution.[23] Arguments that more humane methods exist do not implicate constitutional concerns. Such arguments are more properly addressed to the other branches of government.[24]

For several decades now, medical experts have extolled lethal injection as the most humane method

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[19] *See Van Tran v. State*, 66 S.W.3d 790, 801 (Tenn. 2001).

[20] *Trop*, 356 U.S. at 101.

[21] *See Gregg v. Georgia*, 428 U.S. 153, 173, 96 S.Ct. 2909, 2925, 49 L.Ed.2d 859 (1976) (internal citations omitted).

[22] *Stanford*, 492 U.S. at 378.

[23] *Gregg*, 428 U.S. at 175.

[24] *See Gall v. Commonwealth*, 607 S.W.2d 97, 113 (Ky. 1980), *overruled on other ground in Payne v. Commonwealth*, 623 S.W.2d 867 (Ky. 1981). *Also see State v. Black*, 815 S.W.2d 166, 178 (Tenn. 1991); *State v. Adkins*, 725 S.W.2d 660, 664 (Tenn. 1987).

of execution.[25] Driven by death penalty abolitionists who claimed only to oppose electrocution or whatever other means was in place at the time, legislatures in 37 of the 38 death penalty States and the Congress of the United States have selected lethal injection as their sole or primary means of execution.[26]

Every court to examine lethal injection has affirmed its constitutionality.[27] Those legislative and judicial

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[25] *See Wheeler v. Commonwealth*, 121 S.W.3d 173, 186 (Ky. 2003).

[26] *Cooper v. Rimmer*, 358 F.3d 655, 659, *amended by* 379 F.3d 1029 (9th Cir. 2004) (adds concurrence of Judge James R. Browning); Denno, 63 Ohio St. L.J. at 112-15; *Stanford v. Kentucky*, 492 U.S. 361, 367-70, 109 S.Ct. 2969, 106 L.Ed.2d 306 (1989).

[27] *See e.g., Kelly v. Lynaugh*, 862 F.2d 1126, 1135 (5th Cir.1988), *cert. denied*, 492 U.S. 925, 109 S.Ct. 3263, 106 L.Ed.2d 608 (1989); *Woolls v. McCotter*, 798 F.2d 695, 698 (5th Cir.1986), *cert. denied*, 178 U.S. 1031, 107 S.Ct. 15, 92 L.Ed.2d 769 (1986); *Hill v. Lockhart*, 791 F.Supp. 1388, 1394 (E.D.Ark. 1992) (holding that lethal injection is "the most humane type of execution available"); *Felder v. Estelle*, 588 F.Supp. 664, 671 (S.D.Tex. 1984); *State v. Hinchey*, Ariz. 890 P.2d 602, 610 (1995); *State v. Deputy*, 644 A.2d 411, 421 (Del.Super. 1994); *Hopkinson v. State*, 798 P.2d 1186, 1187 (Wyo. 1990); *State v. Moen*, 309 Or. 45, 786 P.2d 111, 113 (1990); *People v. Stewart*, 123 Ill.2d 368, 123 Ill.Dec. 927, 935, 528 N.E.2d 631, 639 (1988), *cert. denied*, 489 U.S. 1072, 109 S.Ct. 1356, 103 L.Ed.2d 824 (1989); *Poland v. Stewart*, 117 F.3d 1094, 1104-05 (9th Cir.1997), *cert. denied*, 523 U.S. 1082, 118 S.Ct. 1533, 140 L.Ed.2d 683 (1998); *State v. Webb*, 252 Conn. 128, 750 A.2d 448, 458 (Conn.), *cert. denied*, 531 U.S. 835, 121 S.Ct. 93, 148 L.Ed.2d 53 (2000); *State v. Carter*, 89 Ohio St.3d 593, 608, 734 N.E.2d 345 (2000); *LaGrand v. Stewart*, 133 F.3d 1253, 1265 (9th Cir.1998); *Cooper v. Rimmer*, 358 F.3d at 357; *Sires v. State*, 754 So.2d 657, 668 n.20 (Fla. 2000); *Moore v. State*, 771

determinations provide compelling evidence of society's acceptance of executions by lethal injection *and, necessarily, the methodology by which lethal injections are administered.* Consequently, Baze and Bowling cannot show a societal consensus against lethal injection to support a judicial determination by this Court that Kentucky's methodology is cruel and unusual.

Twenty-eight of the death penalty States for which information is available, and the United States Bureau of Prisons, all use the same three-drug cocktail in their lethal injection protocol.[28] Baze and Bowling have not shown, nor can they show based on the wide acceptance of these chemicals, that elected officials or the courts have rejected the use of sodium thiopental, pancuronium bromide, or potassium chloride.

The lethal injection cocktail was developed by an anaesthesiologist.

N.E.2d at 56 n.4; *Wheeler v. Commonwealth*, 121 S.W.3d at 186; *Spencer v. Commonwealth*, 385 S.E.2d 850, 853 (Va. 1989).

[28] Denno, 63 Ohio St. L.J. at 146. Twenty-seven states use the same three drugs that are included in Kentucky's protocol. The State of North Carolina uses a two-drug protocol that includes Sodium Pentothal and Pavulon. The State of New Jersey uses a two-drug protocol that includes Sodium Pentothal and potassium chloride. While the Appellate Division of the Superior Court of New Jersey recently ordered the Department of Corrections to reconsider its protocol, it declined to base its decision on the Department's choice of drugs. *In re Readoption With Amendments of Death Penalty Regulations*, 842 A.2d 207, 212-13 (N.J. Super. Ct. App. Div. 2004).

Baze and Bowling assert there are no scientific studies to support the use of the three chemicals during a lethal injection. They present no evidence that the chemicals used during an execution are not scientifically sound.

In 1977, the now-deceased Senator Bill Dawson of Oklahoma asked Dr. Stanley Deutsch, then head of Oklahoma Medical School's Anesthesiology Department, to recommend a method for executing prisoners through the administration of drugs intravenously.[29] Dr. Deutsch recommended "[t]he administration ... intravenously ... in [specified] quantities of ... an ultra short acting barbiturate" (for example, sodium thiopental) in "combination" with a "nueormuscular [sic] blocking drug[]" (for example, pancuronium bromide) to create a "long duration of paralysis."[30] Deutsch described a way to administer drugs through an intravenous drip so as to cause death rapidly and without pain. "Having been anaesthetised on several occasions with ultra short-acting barbiturates and having administered these drugs for approximately 20 years, I can assure you that this is a rapid, pleasant way of producing unconsciousness."[31] The cocktail was originally designed by an anaesthesiologist based on his education, training, and experience.

Every medical expert who testified during the trial stated that the drugs are used in hospitals across the

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[29] Denno, 63 Ohio St. L.J. at 95.

[30] *Id.*

[31] *Id.*, fn 207.

country.[32] Dr Mark Heath and Dr. Mark Dershwitz stated that sodium thiopental is still a very useful drug, but just rarely used because of its hangover effect.[33]

Plaintiffs have persisted through the course of the litigation with the misnomer that sodium thiopental is an ultra-short acting barbiturate even when given at a three gram dose. In fact, testimony established that sodium thiopental at a three grams dose turns into a long-acting barbiturate.[34] The anesthesiologists do not dispute that if the three grams of sodium thiopental is injected into the condemned inmate, he will be unconscious for hours.[35] While sodium thiopental is not commonly used today, it is still very useful.[36] If the three grams dose is properly introduced the condemned inmate will not be aware of the injection of the other two chemicals in the cocktail.[37]

Pancuronium bromide is important to insure a dignified death. Without the use of pancuronium

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[32] Dr. Scott Hass. Tape. 4/19/05. 11:51:27: Dr. Mark Heath. Tape 1/20/05. 15:15:05. 15:19:30.

[33] Dr. Mark Heath. Tape. 4/20/05. 15:15:05: Dr. Mark Dershwitz. Tape 5/2/05. 9:29:58-0:31:18.

[34] Dr. Scott Haas. Tape. 1/19/05. 12:31:17: Dr. Mark Dershwitz. Tape. 5/2/05. 9:33:32.

[35] Dr. Mark Heath. Tape. 1/20/05. 15:29:07: Dr. Mark Dershwitz. Tape 5/2/05. 9:33:18.

[36] Dr. Hiland. Tape. 1/19/05. 11:51:27: Dr. Scott Haas. Tape 1/19/05. 12:33:51: Dr. Mark Heath. Tape. 1/20/05. 15:15:05: Dr. Mark Dershwitz. Tape. 5/2/05. 9:31:26.

[37] Dr. Mark Dershwitz. Tape. 5/2/05. 9:36:36.

bromide during a lethal injection, the likelihood of involuntary muscle movement of the condemned is high.[38] Death penalty abolitionists desire the elimination of pancuronium bromide from the cocktail in hopes of giving the false appearance that the condemned inmate is in pain and suffering during his execution.[39] If the cocktail consisted only of a three gram close of sodium thiopental and a 240 mEq dose of potassium chloride, the condemned inmate, the abolitionist hope, might thrash or twitch and give the false impression of suffering.[40]

If all three chemicals are properly administered, the death is painless, humane and dignified.[41] Additionally, pancuronium bromide assists in causing the death of the condemned by suppressing the respiratory system and hastens the death.[42] The three-drug cocktail is designed to stop both the respiration and electrical activity of the heart.

While "the origins of the addition of potassium chloride to the combination are uncertain, it probably originated ... from the advice of consulting

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[38] Dr. Mark Heath, Tape, 1/20/05, 15:51:33.

[39] *See Beardslee v. Woodford*, 395 F.3d 1064, 1076 fn. 14 (9th Cir. 2005).

[40] Dr. Mark Dershwitz, Tape, 5/2/05, 9:37:02, 10:23:51.

[41] Dr. Mark Heath, Tape, 1/20/05, 16:07:28.

[42] Dr. Mark Heath, Tape, 1/20/05, 13:35:31; Dr. Mark Dershwitz, Tape, 5/2/05, 9:35:16.

physicians."[43] Potassium chloride quickly stops the electrical activity of the heart.[44]

Plaintiffs have produced no scientific reason why the three-chemical cocktail used in an execution increases the risk of unnecessary and wanton infliction of pain. Unforeseeable and speculative accidents do not add a constitutionally impermissible element of cruelty to an execution.[45] The risk of error need not be eliminated from the process in order for an execution protocol to survive constitutional scrutiny.[46] If the three grams of sodium thiopental is properly injected, the condemned inmate will feel no pain, agony, or anything.[47]

Bowling and Baze has repeatedly asserted that there is no scientific research on the use of the three-drug cocktail in conjunction with a lethal injection execution. This ignores the countless research articles on each individual chemical used and there general acceptance in the medical community. It bears repeating that the two anesthesiologists agree that if the three grams of sodium thiopental is injected into the condemned inmate, he will be unconscious for hours.[48] There is no question that

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[43] *See Beardslee*, 395 F.3d at 1074.

[44] Dr. Mark Dershwitz , Tape, 5/2/05, 9:35:16.

[45] *Resweber*, 329 U.S. at 464.

[46] *See Cooper*, 379 F.3d at 658-59; *Campbell*, 18 F.3d at 667; *Webb*, 750 A.2d at 455.

[47] *Id.* at 9:37:55.

[48] Dr. Mark Heath, Tape, 1/20/05, 15:29:07; Dr. Mark Dershwitz, Tape 5/2/05, 9:33:18.

the evidence established that the three-chemical cocktail is a medically sound and humane form of execution when administered properly.[49]

The protocol passes constitutional muster.

The Constitution does not assign the impossible task of eliminating *all potential* for mishap in an execution procedure. The possibility of human error is implicit in every human endeavor.[50] The U.S. Supreme Court has recognized that unforeseeable accidents do not add a constitutionally impermissible element of cruelty to an execution.[51] The risk of error need not be eliminated from the process in order for an execution protocol to survive constitutional scrutiny.[52]

Administering the drugs in a clinical setting requires more skill because of the delicate balance between unconsciousness and death. This balance is not required in an execution.[53] The possibility that there may be some minor difficulty locating a vein does not subject Bowling and Baze to the offensive punishments the Eighth Amendment prohibits.[54]

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[49] Dr. Mark Dershwitz , Tape. 5/2/05, 9:42:37.

[50] *Webb*, 750 A.2d at 456.

[51] *Resweber*, 329 U.S. at 464.

[52] *See Cooper*, 379 F.3d at 658-59; *Campbell*, 18 F.3d at 667; *Webb*, 750 A.2d at 455.

[53] *Webb*, 750 A.2d at 456.

[54] *See Reid v. Johnson*, 333 F.Supp.2d 543, 550-51 (E.D.Va 2004); *Webb, supra*, 750 A.2d at 456, *citing, Hill v. Lockhart*, 791 F.Supp. 1388, 1391 (E.D.Ark.1992); *see also Snipes v.*

The protocol requires the insertion of the intravenous catheter by persons properly trained and qualified. While the protocol is hampered by ethical restrictions on physicians and nurses, the Commonwealth intends to employ other medical personnel experienced in establishing the intravenous connection, which are a phlebotomist, emergency medical technician, paramedic, or military corpsman with at least one year of professional experience in that field.[55] The IV members must also have participated in two mock execution training exercises.[56] The mock execution exercises occur on a monthly basis and include the insertion of the catheters.[57] Additionally, the IV members must be and remained certified in their profession. If members of the execution team, including the IV team, are determined to be unfit from the mock executions, the person shall be dismissed from the team.[58] Plaintiffs have not offered any evidence to suggest that these persons, possessing the requisite training, would not be capable of inserting an intravenous catheter properly. In fact, the current execution team is experienced. There was evidence presented that the

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DeTella, 95 F.3d 586, 591 (7th Cir.1996) (rejecting the notion that the Eighth Amendment guarantees the right to be free of pain during any medical procedure).

[55] Plaintiffs' Exhibit, 1.

[56] *Id.*

[57] Bill Henderson, Tape, 1/18/05, 11:22:23; Warden Glenn Haeberlin, Tape, 4/19/05, 9:57:22.

[58] *Id.* at 10:10:36.

overwhelming majority of the members of the team participated in the execution of Harper.[59]

The protocol provides for two separate intravenous catheters to be inserted in the condemned inmate. It requires the intravenous catheters to be placed in the following order of the condemned inmate: arms, hands, ankles and/or feet, then neck.[60] The placing of an intravenous catheter is easy.[61] Plaintiffs contend that the insertion of the intravenous catheter into the neck possesses an unnecessary risk of pain and suffering. The neck is the last insertion place to be attempted during an execution.[62] However, in seven years of mock executions, the IV team has always been able to site the catheters without inserting at the neck.[63] This is a speculative claim and the risk of an intravenous catheter ever being sited in a condemned inmate is minute.

There is no objective evidence in the present case indicating that unnecessary pain is inherent in an execution by lethal injection. On the basis of the evidence introduced regarding the chemicals utilized pursuant to the protocol and the corresponding dosages, there simply is no reason to believe that the plaintiffs would experience anything more than the insertion of the intravenous catheter followed by unconsciousness. In fact, the anesthesiologist of the

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[59] *Id.* at 9:57:01.

[60] Plaintiffs' Exhibit, 1.

[61] Dr. Mark Heath, Tape, 1/20/05, 11:18:12.

[62] Plaintiffs' Exhibit, 1.

[63] Warden Glenn Haeberlin, Tape, 1/19/05, 10:17:22.

plaintiffs and defendants concluded that, if properly administered, the combination of agents coupled with the prescribed dosage would result in a quick and painless death.[64]

The protocol eliminates any undue risk of consciousness.

Plaintiffs also argue that the administration and monitoring of the sodium thiopental, when performed by untrained personnel, leads to an unacceptably high risk that the chemicals will not be administered properly. They introduced evidence of the use of a BIS monitor, blood pressure cuff, EKG, or observing for tears, sweat or pupil enlargement should be used to ensure unconsciousness. However, studies question monitoring the depth of anesthesia by means of blood pressure, pulse rate, tears, or sweating.[65] Additionally, blood pressure does not correlate very well with the degree of consciousness of a person.[66] The use of a BIS monitor is not recommended because of the artifacts caused by the use of potassium chloride and the involuntary muscle contractions.[67]

There is no question that if the intravenous catheter is inserted properly that the chemicals will enter the condemned inmate's body. The warden and deputy warden are in the execution chamber with the condemned inmate observing him and the

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[64] Dr. Mark Heath. Tape. 4/20/05. 15:24:04; Dr. Mark Dershwitz. Tape. 5/2/05. 9:42:20, 9:42:38.

[65] Defendants' Exhibit 4; Tape. 4/20/05. 15:38:03.

[66] Dr. Mark Dershwitz. Tape. 5/2/05. 9:58:31.

[67] *Id.* at 9:53:58.

intravenous line for leaks.[68] If a leak is observed in the intravenous line, they will command that the second intravenous line to be used. If the catheter is not in the vein, but in the surrounding tissue, the inmate will scream out in pain when the sodium thiopental is injected because of its high pH level.[69] Plaintiffs failed to present any evidence to support an unjustifiable risk that he will remain conscious during his execution.

The protocol allows the medical professionals discretion to perform their duties.

Baze and Bowling lament that Kentucky's protocol is not as thoroughly detailed as they would prefer. They seem oblivious to the difference between the administration of drugs in a clinical setting and the administration of the same drugs to carry out an execution.

Other courts have dismissed similar challenges to the completeness of lethal injection protocols. A lethal injection protocol is not constitutionally infirm simply because it does not specify every step of the procedure in explicit detail.[70] The protocol provides steps to be taken but allows the professionals to perform these trained duties and does not interfere with their discretion to make decisions.[71]

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[68] Warden Glenn Haeberlin. Tape 4/19/05. 10:10:29. 10:11:01.

[69] Dr. Mark Dershwitz. Tape. 5/2/05. 10:13:16.

[70] *LaGrand*. 883 F.Supp. at 170; *Sims*. 754 So.2d at 668.

[71] Dr. Hiland and Dr. Scott Haas. Tape. 4/19/05. 11:10:45-11:30. 12:27:27.

Reconstituting the sodium thiopental is as easy as making Kool-Aid.

Plaintiffs have made much noise of the reconstitution of the sodium thiopental and the risk of it not being done properly. Reconstituting sodium thiopental is as easy as mixing Kool-Aid.[72] Plaintiffs assert that there is specialized training and education needed to add a liquid provided by the manufacturer to a powder. Reconstituting sodium thiopental is as simple as inserting a syringe into the solution supplied by the manufacturer until the entire solution is drawn from the vial into a syringe then injected into the powder and shaken well until there is no precipitant remaining.[73] It is as simple as 1-2-3.

The risk of consciousness is nonexistent.

A humane and dignified death results from the use of the three-drug cocktail.[74] Two grams of sodium pentothal is adequate to ensure that the prisoners will not feel pain or regain consciousness. Courts in other jurisdictions have ruled that two grams of sodium pentothal will sufficiently sedate a prisoner and that there would be no perception of consciousness or pain on his part.[75]

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[72] Dr. Scott Haas. *Id.* at 12:40:37.

[73] Dr. Mark Heath. *Id.* at 15:53:19-55:18.

[74] *Id.* at 15:21:02.

[75] *In re Williams*, 359 F.3d 811, 813-14 (6th Cir. 2004); *Webb*, 750 A.2d at 151-152; *Sims*, 754 So.2d at 666, n.17, 668, n.19.

A surgical dose of sodium thiopental is typically 300 mg, ten times less than what is used in an execution.[76] A patient will remain unconscious for eight minutes after the administration of a surgical dose of sodium thiopental.[77]

With administering a three gram dose of sodium thiopental, the probability of the inmate regaining consciousness within the ensuing five minutes is 24/10000000 of one percent.[78] The probability of the inmate regaining consciousness within the ensuing ten minutes is 11/100000 of one percent.[79] The probability of the inmate regaining consciousness by minute fifteen is 23/100000 of one percent.[80] The probability of the inmate regaining consciousness within twenty minutes never rises above 43/100000 of one percent.[81]

Plaintiffs presented evidence of an event known as conscious awareness. Once again, Bowling and Baze attempt to confuse the issue with the theory of conscious awareness. Under typical surgical settings, this event only occurs once or twice per every 1000 patients in hospitals.[82] Dr. Dershwitz testified that in his experience, he is unaware of a patient being conscious after the administration of

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[76] Dr. Mark Dershwitz. Tape. 5/2/05. 9:23:17.

[77] *Id.* at 9:24:04.

[78] Plaintiffs' Exhibit. 30.

[79] *Id.*

[80] *Id.*

[81] *Id.*

[82] Defendants' Exhibit. 3: Tape. 1/20/05. 10:23:35. 10:24:19.

three grams of sodium thiopental.[83] It is typically caused by an improper dose of anesthesia or faulty equipment.[84] In other words, conscious awareness is the result of human error or an unforeseen event.[85] There was no evidence introduced that a person would be conscious after the administration of a three gram dose of sodium thiopental.

In light of the inordinately high dosage, the weight or other physical attributes peculiar to a particular inmate will have a negligible impact on these probabilities. Flushing of the IV line prevents the sodium thiopental and the second and third drugs from interacting in the IV tube.[86] Kentucky's protocol eliminates the risk of a precipitate forming in the tube, blocking the induction of the second and third drugs.[87]

Harper did not feel pain or suffer during his execution.

Harper was executed in a constitutional manner. The only evidence presented to allege Harper was conscious during his execution was based on the venous blood samples collected during his autopsy.

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[83] Dr. Mark Dershwitz. Tape. 5/2/05. 11:53:18.

[84] Defendants' Exhibit. 3: Tape. 1/20/05. 10:23:35. 10:21:19. 15:36:12.

[85] Defendants' Exhibits 3. 1: Tape. 1/20/05. 10:23:35. 10:21:19. 15:36:12.

[86] Dr. Mark Heath. Tape. 1/20/05. 15:20:30: Dr. Mark Watson. Tape. 1/21/05. 11:57:35: Dr. Mark Dershwitz. Tape. 5/2/05. 10:28:06.

[87] Dr. Mark Dershwitz. Tape. 5/2/05. 10:28:06.

The sodium thiopental levels in Harper's venous blood are not the proper samples to determine the levels of sodium thiopental in his system. Every scientific published research on sodium thiopental levels rely on the levels from arterial blood samples.[88] It is not valid to compare venous blood concentrations to determine the level of surgical anesthesia.[89] The sodium thiopental level in the brain is what produces unconsciousness.[90] The arterial blood concentration, not the venous, reflects the level of sodium thiopental in the brain.[91]

Dr. Watson questioned Harper's degree of consciousness based solely on the venous blood concentration levels from his autopsy.[92] His conclusion was based on comparing venous blood concentration to accepted arterial blood concentration standards to determine surgical anesthesia, which is not an acceptable comparison in the medical community. Dr. Watson also could not state that within a reasonable degree of medical certainty, Harper was conscious much less felt any pain.[93]

Every witness who observed the execution of Harper testified that he showed no signs of pain, suffering,

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[88] *Id.* at 9:50:46.

[89] *Id.* at 9:50:16.

[90] Dr. Mark Watson. Tape. 4/21/05. 12:26:08.

[91] Dr. Mark Dershwitz. Tape. 5/2/05. 9:46:37.

[92] Dr. Mark Watson. Tape. 4/21/05. 12:06:58.

[93] Dr. Mark Heath. Tape. 4/20/05. 15:31:17; Dr. Mark Watson. Tape. 4/21/05. 10:21:58. 10:22:32; 12:06:36.

or agony. He was unconscious within fifteen seconds after the sodium thiopental was introduced and prior to that, the only movements observed was him licking his lips and wiggling his big toe.[94] Harper died five minutes after his execution began.

Plaintiffs' own experts could not within a reasonable degree of medical certainty state that Harper was conscious much less felt any pain.[95] There was no evidence of leaks in the intravenous line. The EKG readings of Harper did not show any signs of distress during his execution prior to his death.[96] There was no evidence introduced of infiltration at the intravenous site.[97] There was evidence that the chemicals circulated through Harper's body.[98] There was no competent evidence introduced to support Plaintiffs' claim that Harper was conscious during his execution.

Conclusion

Kentucky's lethal injection methodology satisfies contemporary community standards. "The risk of accident cannot and need not be eliminated from the

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[94] Tom Campbell. Tape. 1/18/05. 10:19:33: Bill Henderson. Tape. 1/18/05. 11:21:38-11:22:22: Warden Glenn Haeberlin. Tape. 1/19/05. 10:07:18. 10:18:18.

[95] Dr. Mark Heath. Tape. 4/20/05. 15:34:47: Dr. Mark Watson. Tape. 4/21/05. 10:21:58. 10:22:32. 12:06:36.

[96] Dr. Mark Heath. Tape. 1/20/05. 16:00:22.

[97] Dr. Tracey Corey. Tape. 1/18/05. 14:25:12.

[98] Dr. Tracey Corey. Tape. 1/18/05. 14:28:36.

execution process in order to survive constitutional review."[99]

The judgment of a court reviewing such a matter should be influenced by objective factors to the greatest extent possible.[100] The most common objective factor relied on by the courts are the statutes passed by society's elected representatives.[101] The courts will decline to rest their decisions regarding a particular punishment on "uncertain foundations" such as opinion polls, the views of interest groups, or positions adopted by professional associations.[102]

Bowling's and Baze's challenge to the protocol is not based on any factors peculiar to them, such as compromised veins. Their challenge is a hodgepodge of speculative and unforeseeable human errors. Even their experts concedes that the amount of sodium thiopental given under the protocol, if properly administered, would be sufficient to cause loss of consciousness within sixty seconds of the administration and each chemical is lethal individually.

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[99] *See Campbell*, 18 F.3d at 682.

[100] *See Coker*, 433 U.S. at 592.

[101] *See Penry v. Lynaugh*, 492 U.S. 302, 31 (1898).

[102] *Stanford*, 492 U.S. at 377.

MAY 20, 2005

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COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
CIVIL ACTION NO. 04-CI-01094

RALPH BAZE AND
THOMAS C. BOWLING — PLAINTIFFS

FINDINGS OF LAW AND CONCLUSIONS OF FACT

JOHN D. REES, COMMISSIONER
KENTUCKY DEPARTMENT OF CORRECTIONS;
GLENN HAEBERLIN, WARDEN KENTUCKY
STATE PENITENTIARY; AND
HON. ERNIE FLETCHER, GOVERNOR
OF KENTUCKY — DEFENDANTS

This action involves a challenge to the constitutionality of Kentucky's death penalty lethal injection protocol on grounds that it constitutes cruel and unusual punishment under the Eighth Amendment to the United States Constitution and Section 17 of the Kentucky Constitution.[1] There are no issues before the Court involving the Plaintiffs' guilt and convictions by jury. Nor are the jurys' recommended death sentences at question. The only issue to be decided is the manner in which the Commonwealth of Kentucky will carry out the sentence on the condemned Plaintiffs. A bench trial was conducted and the parties have submitted post-

[1] The 8th Amendment to the United States Constitution and Section 17 of the Kentucky Constitution state: "Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted."

trial briefs. This Court now makes the following findings of fact and conclusions of law.

BACKGROUND

In May of 1977, Oklahoma became the first state to adopt lethal injection.[2] Execution through the administration of drugs intravenously was recommended by Dr. Deutsch, then head of Oklahoma's Medical School Anesthesiology Department because lethal injection was "[w]ithout question... extremely humane in comparison to" electrocution and lethal gas.[3] The typical lethal injection consists of three chemicals.[4] The first chemical is an ultra-short acting barbiturate, sodium thiopental (trademark name Sodium Pentathol). The second chemical is pancuronuim bromide (trademark name Pavulon), a muscular paralytic agent. The third chemical, potassium chloride, induces cardiac arrest.[5]

Since Oklahoma's adoption in 1977, thirty-seven States have approved lethal injection as a means of execution.[6] However, there is scant evidence that ensuing States' adoption of lethal injection was supported by any additional medical or

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[2] Deborah W. Denno, *Symposium Addressing Capital Punishment through Statutory Reform*, 63 Ohio St L.J. 63 (2002).

[3] Id. at 95-96.

[4] Although the original lethal injection protocol from Oklahoma recommended only the first two chemicals, Sodium Pentathol and Pavulon.

[5] Id. at 98.

[6] *Stanford v. Kentucky*, 492 U.S. 361, 362 (1989), *abrogated by Roper v. Simmons*, 125 S.Ct. 1183 (2005).

scientific studies that the adopted form of lethal injection was an acceptable alternative to other methods. Rather, it is this Court's impression that the various States simply fell in line relying solely on Oklahoma's protocol from Dr. Deutsch in drafting and approving a lethal injection protocol. Kentucky is no different.

In 1998, the General Assembly of the Commonwealth of Kentucky adopted lethal injection as a method of execution. The relevant statute, KRS 431.220, states in part: "every death sentence shall be executed by continuous intravenous injection of a substance or combination of substances sufficient to cause death." Thereafter, Phillip Parker, Warden at the Kentucky State Penitentiary, instituted a protocol for the injection of Sodium Thiopental, Pancuronium Bromide, and Potassium Chloride. On May 25, 1999, Eddie Lee Harper became the first and only inmate to date to be executed under Kentucky's lethal injection protocol.

The Plaintiffs in the case at hand, Ralph Baze and Thomas C. Bowling, are both death sentenced inmates under the supervision of the Kentucky Department of Corrections, and held at the Kentucky State Penitentiary in Eddyville, Kentucky. By default, both Plaintiffs have selected the lethal injection method of execution. *See* KRS 431.220(1)(b). The Plaintiffs filed this action in the Franklin Circuit Court pursuant to Civil Rules 57 (declaratory judgment) and 65.01 (injunctive relief) for threatened violations of their right to be free from cruel and unusual punishment under the Eighth

Amendment of the United States Constitution and Section 17 of the Kentucky Constitution.

The Plaintiffs maintain that the Defendants' lethal injection protocol violates their state and federal constitutional rights against cruel and unusual punishment because it utilizes the drug pancuronium bromide (Pavulon), provides only a low dose of a short-acting barbiturate (Sodium Pentathol), and fails to implement adequate execution procedures.[7] The Plaintiffs assert that the chemicals used cause a level and risk of pain that is more than the Constitution tolerates and is unnecessary because readily available alternatives exist that pose less risk of pain and suffering.

The Plaintiffs ask the Court to issue a declaratory judgment that the Defendants' procedures are cruel and unusual because they: (1) use pancuronium bromide during an execution; (2) use potassium chloride during an execution; (3) fail to administer an analgesic; (4) use an ultra short acting barbiturate; (5) fail to ensure that they are delivering an adequate concentration of sodium thiopental; (6) fail to specify the concentration of sodium thiopental; (7) insert a needle into the condemned's neck; (8) spend up to 60 minutes to insert an I.V.; (9) fail to monitor for anesthesia

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[7] The Plaintiffs also presented a challenge to the use of a "cut down" procedure to obtain venous access, which is no longer at issue due to Defendants' voluntary removal of the procedure from the lethal injection protocol. The Plaintiffs also challenged the constitutionality of electrocution, which this Court dismissed in an order dated October 13, 2004. Neither Plaintiff has elected to be executed by electrocution.

awareness; and (10) lack equipment and trained personnel for resuscitation of life in the event of a stay. Last, the Plaintiffs request a declaratory judgment on the issue of whether the Defendants are violating KRS 431.220 by not providing a continuous administration of the lethal injection chemicals.

The Defendants, Kentucky Department of Corrections Commissioner John D. Rees, Kentucky State Penitentiary Warden Glenn Haeberlin, and Governor Ernie Fletcher maintain that Kentucky's execution protocol by lethal injection passes constitutional muster. The Defendants argue that the Plaintiffs have failed to demonstrate that Kentucky's lethal injection protocol is incompatible with evolving standards of decency or involves the unnecessary and wanton infliction of pain. Rather, the evidence presented proves that there is no unnecessary pain inherent in an execution by lethal injection and chemicals utilized in the protocol according the corresponding dosages would result in a quick and painless death.

In further support of the validity of Kentucky's lethal injection protocol, the Defendants emphasize: (1) the protocol eliminates any undue risk of consciousness, (2) the protocol allows medical professionals discretion to perform their duties, (3) there is minimal risk of error in reconstituting Sodium Thiopental, and (4) any speculated risk of accident during the execution process does not need to be eliminated in order to survive constitutional review. In sum, the Defendants assert that the Plaintiffs have not demonstrated that Kentucky's lethal injection methodology creates an unreasonable

and medically unacceptable risk of subjecting them to undue pain and suffering.

STANDARD OF REVIEW

This action was filed in accordance with Kentucky Rule of Civil Procedure 57. The Plaintiffs ask the Court for declaratory judgment that Kentucky's lethal injection execution protocol violates or threatens to violate their rights to be free from cruel and unusual punishment. To prevail, the Plaintiffs must establish this constitutional violation by a preponderance of the evidence. *Woods v. Com.*, 142 S.W.3d. 24, 43 (Ky. 2004).

A method of execution is viewed as cruel and unusual punishment under the U. S. Constitution when the procedure for execution creates a substantial risk of wanton and unnecessary infliction of pain, torture or lingering death. *Gregg v. Georgia*, 428 U.S. 153, 173 (1976)(plurality opinion). When considering whether the method of execution violates the Eighth Amendment to the U. S. Constitution prohibition on cruel and unusual punishment, courts must consider whether such is contrary to evolving standards of decency that mark the progress of a maturing society." *Trop v. Dulles*, 356 U.S. 86, 101 (1958).

Under Section 17 of the Kentucky Constitution, a method of punishment is cruel and unusual if it shocks the moral sense of all reasonable men as to what is right and proper under the circumstances. *Weber v. Com.*, 303 Ky. 56, 196 S.W.2d 465, 469 (Ky. 1946).

The framework for addressing the constitutionality of an execution method includes a determination: (1) whether the method of execution comported with the contemporary norms and standards of society; (2) whether it offends the dignity of the prisoner and society; (3) whether it inflicts unnecessary physical pain; and (4) whether it inflicts unnecessary psychological suffering. *Weems v. United States*, 217 U.S. 349 (1910).

FINDINGS OF FACT

Based upon the evidence presented at trial, the Court finds as follows:

1. In 1998, the Commonwealth of Kentucky first drafted a lethal injection protocol.

2. Those persons assigned the initial task of drafting the Commonwealth of Kentucky's first lethal injection protocol were provided with little to no guidance on drafting a lethal injection protocol and were resolved to mirror protocols in other states, namely Indiana, Virginia, Georgia, and Alabama.

3. In developing a lethal injection execution protocol, the Commonwealth of Kentucky, Department of Corrections, did not conduct any independent scientific or medical studies or consult any medical professionals concerning the drugs and dosage amounts to be injected into the condemned.[8] Nor were

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[8] Kentucky appears to be no different than any other state or the Government of the United States. In addition, the Plaintiffs have not presented any scientific study indicating a

any medical personnel consulted in 2004 when the lethal injection protocol dosage of sodium thiopental (trade name Sodium Pentathol) was increased from 2 grams to 3 grams.

4. The current lethal injection protocol requires the injection of the following drugs in the condemned in the sequence of: Sodium Thiopental (3gm), Saline (25mg), Pavulon (50mg), Saline (25mg), and Potassium Chloride (240 meq). Prior to execution by lethal injection, the condemned will be provided with a therapeutic injection of Valium if requested.

5. The current lethal injection protocol requires the Warden of the Department of Corrections to reconstitute the Sodium Thiopental into solution form prior to injection. The Warden has no formal training on reconstituting the drug, which requires inserting a syringe into the solution supplied by the manufacturer until the entire solution is drawn from the vial into a syringe which is then injected into the powder and shaken until no precipitate remains. If the manufacturers' instructions for reconstitution of Sodium Thiopental are followed, this Court finds there would be minimal risk of improper mixing, despite converse testimony that a layperson would have difficulty performing this task.

6. The current lethal injection execution protocol employs certified phlebotomists and

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better method of execution by lethal injection.

emergency medical technicians (EMT) to perform the necessary venipunctures. These persons (I.V. Team) are provided up to one (1) hour to find suitable IV sites and to correctly insert I.V. catheters in the arm, hand, leg, or foot of the condemned. The one (1) hour window is not excessive but rather necessary due to potential problems that may arise when attempting a venipuncture including: failure to find a suitable I.V. site, "blowouts," problems with scar tissue, and problems caused by nervousness. The possibility that there may be minor difficulty locating a vein does not subject the inmate to offensive punishments the Eighth Amendment prohibits. *Reid v. Johnson*, 333 F.Supp.2d 543, 551 (E.D.Va., 2004).

7. The current lethal injection execution protocol provides the I.V. team with the option of inserting a catheter into the neck of the condemned, by use of the carotid artery or jugular vein. However, a medical doctor for the Department of Corrections advised against this procedure and would not perform the procedure. The medical staff who would perform this procedure are inadequately trained to do so and there are substantial and unnecessary risks associated with insertion of an intravenous catheter into the carotid artery or jugular vein.

8. Sodium Thiopental is an ultra short acting barbiturate. Three (3) grams of Sodium Thiopental, when administered properly, will

render a person unconscious within one (1) minute of injection. Sodium Thiopental is the "humane" component of Kentucky's lethal injection protocol.

9. Pancuronium Bromide (Pavulon) is a muscular paralytic agent. Fifty (50) milligrams of Pancuronium Bromide properly administered will cause the rapid onset of paralysis in the condemned. The use of Pancuronium Bromide in Kentucky's lethal injection protocol serves no therapeutic purpose. Its primary use is to prevent muscular movements in the condemned, involuntary or otherwise, that may result from the subsequent injection of Potassium Chloride. Pancuronium Bromide's secondary purpose in Kentucky's lethal injection protocol is to stop respiration.

10. Potassium Chloride is utilized in Kentucky's lethal injection protocol to ensure death. Proper administration of 240 meq of Potassium Chloride will successfully induce cardiac arrest in the condemned by disrupting electrical signaling necessary for proper heart function.

11. The contact of Sodium Thiopental with Pancuronium Bromide causes a precipitate, which may cause serious problems in the execution process including clogging of the I.V. line and inadequate dosages of the drugs injected into the condemned. However, there is a minimal risk that a precipitate will form.

The lethal injection execution protocol contains the procedural safeguard of flushing the I.V. line with a saline solution after the administration of each drug to prevent residual contact.

12. Kentucky's lethal injection protocol uses an electrocardiogram (EKG) to verify the death of the condemned. Kentucky's lethal injection protocol does not use the EKG during administration of the drugs to monitor for consciousness.

13. Kentucky's lethal injection protocol does not use a blood pressure cuff during administration of the drugs to monitor for consciousness.

14. A BIS (Bispectral Index) monitor is a device that uses algorithms from EEG (electroencephalograph) waves to monitor for consciousness. It is not regular medical standard to use a BIS monitor during surgery to monitor for consciousness. Kentucky's lethal injection protocol does not use a BIS monitor.

15. An automated defibrillator and crash cart are present in the event that a stay of execution is ordered and the condemned is to be revived. There is a medical doctor present that will assist in any effort to revive the condemned prisoner.

16. If there is a stay of execution, it is not probable that a condemned inmate will be

revived after injection of the second drug, Pancuronium Bromide (Pavulon).

CONCLUSIONS OF LAW

Based upon the above findings of fact, this Court makes the following conclusions of law:

1. Kentucky's lethal injection protocol is not in violation of the literal language of KRS 431.220. The protocol provides for a continuous administration of the lethal injection chemicals. The Plaintiffs' argument to the contrary is predicated upon a strained interpretation of the "continuous administration" language in the statute.

2. The Plaintiffs have not demonstrated by a preponderance of the evidence that Kentucky's method of execution by lethal injection deviates from contemporary norms and societal standards in capital punishment. See *State of Connecticut v. Webb*, 750 A.2d 448, 457 (2000)("Of the thirty-eight states permitting capital punishment, at least thirty-four have adopted lethal injection as a manner of execution. They have done so because it is universally recognized as the most humane method of execution, least apt to cause unnecessary pain.").

3. The Plaintiffs have not demonstrated by a preponderance of the evidence that Kentucky's method of execution by lethal injection offends the dignity of the prisoners and society as a whole.

4. The Plaintiffs have not demonstrated by a preponderance of the evidence that Kentucky's method of execution by lethal injection inflicts unnecessary physical pain upon the condemned. Although evidence was presented that other drugs were available that may decrease the possibility that the condemned may experience pain, the Eighth Amendment and Section 17 of the Kentucky Constitution do not provide protection against all pain, only cruel and unusual pain. Moreover, the fact that other drugs are available that may further assure that the condemned feels no pain, this Court may not require the legislature (or in this case the Executive Branch) to select the least severe penalty possible so long as the penalty selected is not cruelly inhumane. *Gregg v. Georgia*, 428 U.S. 153, 175 (1976).

5. The Plaintiffs have not demonstrated by a preponderance of the evidence that Kentucky's method of execution by lethal injection inflicts unnecessary psychological suffering upon the condemned.

6. The Plaintiffs have not demonstrated by a preponderance of the evidence that Kentucky's lethal injection protocol, as it pertains to reviving the Plaintiffs in the event of a stay, is so inept that it deprives the Plaintiffs of due process and fundamental fairness. The New Jersey Superior Court, in *In the Matter of Readoption with Amendments of the Death Penalty Regulations*, 842 A.2d 207, 211 (2004),

has stated that "an inmate who is being executed in error because a stay of execution has been issued after the injection is administered is wrongfully deprived of due process and fundamental fairness...if the State does not take every feasible and possible step to correct that error." The standards the Plaintiffs would have this Court apply would require that all executions take place in a trauma center with a team of cardiac surgeons standing by. The Kentucky lethal injection execution protocol takes the necessary steps for revival sufficient to satisfy the due process rights of the Plaintiffs.

7. The Plaintiffs have demonstrated by a preponderance of the evidence that the procedure where the Department of Corrections attempts to insert an intravenous catheter into the neck through the carotid artery or jugular vein does create a substantial risk of wanton and unnecessary infliction of pain, torture or lingering death. Accordingly, that portion, and only that portion, of Kentucky's lethal injection protocol allowing for this procedure is stricken as violating the Plaintiffs' safeguards against cruel and unusual punishment under the Eighth Amendment of the United States Constitution and Section 17 of the Kentucky Constitution.

CONCLUSION

The citizens of the Commonwealth of Kentucky, through their elected representatives, have chosen the death penalty as punishment for certain offenses. These elected representatives have also selected lethal injection as the method for carrying out this punishment. While the ultimate responsibility lies with the citizens, the duty of implementing these decisions has been delegated to the personnel who operate the institution where the death chamber is located. Those persons who developed Kentucky's lethal injection protocol were apparently given the task without the benefit of scientific aid or policy oversight. Kentucky's protocol was copied from other states and accepted without challenge until this action occurred.

This action may be the first real public discussion of the lethal injection protocol in Kentucky. During the course of this litigation the protocol has been amended by the Department of Corrections to increase the dosage of the short acting barbiturate, to drop one procedure (the cut-down), and the Department's medical personnel nave agreed that any injection in the neck is inappropriate. The unilateral actions by the Department are commendable.

The Department of Corrections should amend the current protocol to eliminate the need to protect its contents from public view. This Court has specifically maintained the confidential nature of the security procedures surrounding an execution for obvious reasons. Since the nature of the drugs used

and the method for administering those drugs during an execution have been discussed publicly in this action, there seems to be little reason why the Department of Corrections cannot publish a lethal injection protocol that does not compromise the security of the institution or the personnel involved. The citizens of this Commonwealth are entitled to know the method and manner for implementing their public policy.

There are no methods of legal execution that are satisfactory to those who oppose the death penalty on moral, religious, or societal grounds. And although this Court would prefer that Kentucky's protocol for lethal injection be based upon more independent medical or scientific studies, that is not a current requirement of the U.S. or Kentucky Constitution.

The Defendants are enjoined from utilizing that portion of the protocol which permits injection of lethal chemicals into the neck of the condemned prisoner. The execution protocol adopted by the Commonwealth of Kentucky, with the one exception, complies with the constitutional requirements against cruel and unusual punishment.

SO ORDERED this the 8th day of July, 2005.

This is a final and appealable order.

/s/ Roger L. Crittenden
Roger L. Crittenden
Judge, Franklin Circuit Court

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Article published May 3, 2006

Problems bog down execution of Clark
Drugs take his life after 86 minutes

By JIM PROVANCE and CHRISTINA HALL BLADE STAFF WRITERS

LUCASVILLE, Ohio — In Ohio's first lethal injection gone awry, condemned inmate Joseph Lewis Clark yesterday repeatedly shook his head and said, "It don't work" as it became clear the .gs designed to kill him weren't.

The execution team then closed the curtain separating witnesses from the execution chamber, but Clark's moans and groans were clearly audible through the glass.

Ultimately, the 57-year great-grandfather and Toledo native was pronounced dead at 11:26 a.m., nearly 90 minutes after the execution's start. The process, which usually takes 10 minutes, was also extended by Clark's statement, the longest ever before an execution.

Clark became the 21st man and the first from Lucas County to be executed since Ohio resumed carrying out the death penalty in 1999.

The execution proceeded despite the issuance of a stay by a federal court Monday in the execution of a Hamilton County man set for June 15. That inmate has a lawsuit pending that challenges the constitutionality of the lethal injection protocol, arguing that the choice of drugs could lead to cruel and unusual punishment. Clark is not a party to that suit.

Clark was executed at the Southern Ohio Correctional Facility in Lucasville, Ohio, for the Jan. 13, 1984, slaying of David Manning, a 23-year-old husband and father who was shot at a gas station on Airport Highway in South Toledo.

He received a life sentence for killing another clerk, Donald Harris, 21, the night before at a store on Hill Avenue.

> Clark was arrested after shooting a third man, Robert Roloff, during a holdup at a bank ATM in Toledo, three days after shooting Mr. Manning. Mr. Roloff survived.

"Justice has been served today for both David Manning and Donald Harris. Joseph Clark has finally received that which was his due," Mary Ellen (Manning) Gordon, Mr. Manning's widow, said after the execution.

> Mrs. Gordon said she "did not shed a single tear for the execution of Joseph Clark," whom she said was "a perfect candidate" to receive the death penalty. Mr. Manning's brother, Michael, said that Clark tried to be a martyr. But he said Clark is "not a martyr. He's

just a murderer."

Michael Manning and Brenda Kuhl, Mr. Harris' sister, said Clark died peacefully.

"I think that it was kind of an easy way for him to go," said Ms. Kuhl, who was in a waiting room with other relatives who did not see the execution.

Nevelle Stallworth, Clark's nephew in Toledo, said he learned about what happened at the execution on the news.

"They know what they're doing down there. They were gonna carry it through," he said. "As long as he went peacefully."

The execution team had struggled for 25 minutes to find usable veins in both of Clark's aims, and made the decision to proceed with the execution with just one intravenous shunt in his left arm.

That vein apparently collapsed as the execution process began, according to Terry Collins, in his first week as director of the Ohio Department of Rehabilitation and Correction.

Clark was a longtime intravenous drug user before his arrest 22 years ago.

After along speech in which he thanked his family and friends, apologized to his victims' families, and preached against the dangers of drugs, Clark quoted from the Martin Luther King, Jr., "I Have a Dream" speech in declaring himself: "Free at last. Free at last.

Thank God Almighty, I am free at last."

Then the problems began.

At first, Clark was extremely still, breathing shallowly, and appeared to have fallen asleep except for occasional movement of his feet.

But after a few minutes, he raised his head and, frustrated, shook it back and forth, repeatedly declaring, "It don't work."

The execution team pulled the curtain closed at 10:37 a.m. The curtain reopened at 11:12 a.m. and the process resumed. But even then, Clark raised his head about a dozen times and appeared to try to speak. Finally, he rested his head and clearly began to snore.

The snoring ceased and he appeared to stop breathing at 11:23 a.m. He was formally declared dead by the prison warden three minutes later.

Mr. Collins said he was on the phone with the governor's and attorney general's offices discussing contingencies if the second attempt failed.

Clark died from a trio of drugs that first put him to sleep, then stopped his breathing, and finally stopped his heart.

The irony of the use of drugs in his death was not lost on Clark.

In his final statement, he said, "I would like to tell them young brothers and sisters also all over the

world, do not let drugs ruin your life, ruin your body, and destroy your mind. Today my life is being taken because of drugs. If you live by the sword, you die by the sword."

Lucas County Prosecutor Julia Bates said yesterday was a very difficult day" for everyone in law enforcement and everyone in Ohio.

"There's no joy in Lucasville on anyone's side." she said.

Contact Jim Provance at: jprovance@theblade.com or 614-221-0496.

May 3, 2006

Trouble Finding Inmate's Vein Slows Lethal Injection in Ohio

By ADAM LIPTAK

It took almost 90 minutes to execute Joseph L. Clark in an Ohio prison yesterday, in what critics of the death penalty said was the latest in a series of botched executions nationwide.

> Courts around the country are considering a variety of challenges to lethal injections, which lawyers for death row inmates contend can be needlessly painful and therefore cruel and unusual punishment.
>
> In Mr. Clark's case, prison technicians had trouble finding a suitable vein through which to administer the lethal chemicals, said a prison spokeswoman, Andrea Dean. Ms. Dean speculated that Mr. Clark's veins might have been damaged by drug abuse.

"It took them about 22 minutes, and they found one good site," she said.

The deadly chemicals started to flow at 10:25 a.m., Ms. Dean said.

> "But after about three or four minutes," she continued, "the inmate was able to raise his

> head off the gurney and said, 'It's not working.' " The vein had collapsed, she said.
>
> The curtains separating witnesses from the execution chamber were then closed for more than a half-hour while technicians tried to find a second suitable vein. After one was located, the execution continued, and Mr. Clark was pronounced dead at 11:26 a.m.
>
> Ohio has executed 21 prisoners since 1999, all by lethal injection. "We have never had an incident like this," Ms. Dean said. "We are going to review our policies and our protocol."

Mr. Clark, 57, was convicted of the 1984 killing of David Manning, a gas station clerk. He was also serving a life sentence for killing a second man. He was executed at the Southern Ohio Correctional Facility in Lucasville.

Opponents of the death penalty said it was time to re-examine lethal injections, which are used in 37 states.

"The constitutional requirement is that the best available technology be used to extinguish life as painlessly as possible," said Eric M. Freedman, a law professor at Hofstra University. "Today's botched execution makes perfectly clear that the first generation of drug protocols needs to be succeeded by a second generation, just as the electric chair became technologically obsolete and therefore vanished."

Deborah W. Denno, a Fordham University law professor who is an authority on methods of execution, expressed surprise at yesterday's events. "With all the visibility of this topic and all the scrutiny," she said, "the authorities still are not able to do these executions properly."

CNN.com

Killer executed the hard way

Condemned man sits up and tells executioners, 'It's not working'

COLUMBUS, Ohio (Reuters) -- A double murderer was put to death in Ohio Tuesday but not until after one of his veins collapsed, causing the condemned man to sit up and tell his executioners, "It's not working," officials said.

The Ohio Department of Corrections said Joseph Clark, 57, was pronounced dead at 11:26 a.m. ET following an injection of lethal chemicals at the Southern Ohio Correctional Institution in Lucasville.

Spokeswoman Andrea Dean said the execution was delayed about 90 minutes because technicians had trouble initially finding a site in Clark's arm for the intravenous line carrying the chemicals.

Then shortly after the poisons were supposed to have been pumping into his body, she said, he sat up saying, "It's not working. It's not working."

Officials determined that a vein had collapsed. Curtains were closed to block witnesses' view until technicians found a vein in his other arm. They were then parted to reveal him dying, witnesses said.

Ohio has used lethal injection repeatedly without similar problems, but this method of execution, used in all but one of the 38 states that impose capital punishment, is under legal attack.

The U.S. Supreme Court has a challenge before it from Florida claiming that it causes undue pain, while the matter is also before a court in California.

The method involves three separate drugs: the first renders the victim unconscious, the second stops all muscle movement except the heart and the third stops the heart, causing death.

Clark was given a meal of his request Monday, consisting of shrimp, steak, chicken wings, fries, rolls with butter, cherry pie and a soft drink.

Just before the execution process started the first time Clark made a final statement apologizing to his victims' families and saying "Today my life is being taken because of drugs. If you live by the sword you die by the sword."

On January 13, 1984, Clark shot Marine reservist and father of two David Manning and stole $65 from the gas station where Manning was working.

The murder came during an eight-day crime spree in which Clark also murdered another man, student Donald Harris, and wounded a third man during an attempted robbery.

Harris was filling in for a friend at a convenience store when Clark entered and demanded the contents of the store's safe. Harris said he did not know the safe's combination, and was shot in the back of the head.

Clark later attempted to rob a man at an automated teller machine, the two struggled, and the victim was wounded twice. A witness saw the attack and noted the license plate number on Clark's car.

After he was arrested, Clark tried to hang himself in his jail cell, and confessed to the murders while recovering in a hospital. He was sentenced to death for Manning's murder.

> Clark said he robbed to support a drug habit.
>
> "Neither the parole board nor I are persuaded by Mr. Clark's attempt to explain away Mr. Manning's murder," Gov. Robert Taft said in refusing clemency last week.

Taft said Clark's "well established prior criminal conduct, both as a juvenile and as an adult, signifies a propensity for violent behavior."

> Clark was the 21st person to be executed in Ohio since the state resumed carrying out the death penalty in 1999, and the 1,021st inmate executed in the United States since capital punishment resumed in 1976.

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THE PLAIN DEALER

Condemned killer complains lethal injection 'isn't working'

Ohio's executioners struggle 40 minutes to find a working vein

Wednesday, May 03, 2006

John Mangels
Plain Dealer Science Writer

"This isn't working," convicted murderer Joseph Clark said Tuesday morning as the lethal cocktail of drugs that was supposed to end his life backed up in his ruined vein and his arm began to swell.

Clark was commenting on his own problem plagued execution, which finally came to pass after an unprecedented 40-minute scramble to find a working blood vessel that would accommodate the trickle of anesthetic and poisons. But his sentiments are shared in a broader context by opponents of lethal injection, who are challenging whether the procedure is a humane way to end a prisoner's life. The incident at the Lucasville prison - which quickly became national news - is the latest in a recent string of

events that have focused increasing legal and political scrutiny on capital punishment by the needle.

"This is happening at a time when everybody is looking at lethal injection," said University of Colorado sociologist Michael Radelet, who specializes in death penalty issues.

Later this week, the United Nations' Committee on Torture is expected to question U.S. officials about whether lethal injections violate international treaties.

"It's very clear there are real problems with how it's working," said Jenni Gainsborough, citing the Ohio incident.

She directs the Washington, D.C., office of the group Penal Reform International.

After the U.S. Supreme Court reinstated the death penalty in 1976, states began to explore more humane ways of ending convicts' lives than the electric chair or hangman's noose. Texas was the first to employ lethal injection, in 1982, and it quickly became the most popular means of dispatching inmates. Ohio adopted lethal injection when it resumed executions in 1999.

Legal challenges asserting the technique amounts to cruel and unusual punishment are not new. They have gained traction recently with the April 2005

publication of a study that raised questions about lethal injection.

Condemned inmates typically get a mix of three chemicals: a sedative to make them unconscious, a paralyzing drug to prevent convulsions, and an agent to stop the heart.

Writing in the British medical journal The Lancet, doctors who examined toxicology reports of 49 inmates executed in four states found that 21 had so little anesthetic in their blood that they could have been aware during the death process. (Critics questioned the tests' accuracy.)

The Ohio public defender's office is one of a number of groups that has filed federal civil rights lawsuits claiming the drugs are unreliable and corrections workers who administer them lack training.

The Ohio suit contends the combination of insufficient anesthetic and the paralyzing drug could render the inmate awake but unable to move or cry out while suffering a painful death by suffocation and heart attack. Veterinarians are forbidden to use the combination to put dogs to sleep, said assistant state public defender Kelly Culshaw.

The Supreme Court heard oral arguments last week in a Florida suit raising similar concerns.

The complications that delayed Tuesday's execution raise another issue. Intravenous drug users like Clark who have damaged their veins are notoriously

difficult to prepare for lethal injection. A surgical procedure called a "cut-down," which exposes deeper, bigger blood vessels, is one solution, but medical professional groups say doctors' and nurses' participation in executions is unethical.

The people who struggled to find a useable vein for Clark's execution included paramedics, but not a nurse or doctor, said Ohio corrections department spokeswoman Andrea Dean.

Similar problems with lethal injection have occurred at least a dozen times in other states over the years, according to a review by Radelet.

"This seems to be a method the states really don't have a grip on," said Richard Dieter, executive director of the Death Penalty Information Center in Washington. "They do it with what little training they have, but when something goes wrong, they don't know what to do."

Much of the work on Clark took place behind a closed curtain, which concerns the American Civil Liberties Union of Ohio.

Dean, who later recounted Clark's remark, said corrections director Reginald Wilkinson ordered the curtain closed "because he didn't want additional pressure on the execution team," not to hide anything.

The Ohio ACLU contends the entire lethal injection process, from intubation to declaration of death,

should be visible, to help the public understand and debate its impact. In 2003, the organization sued the state overaccess. The case is pending.

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BBC NEWS

Struggle to execute murderer

The execution of a US double murderer took nearly 90 minutes after the team trying to deliver a lethal injection had trouble finding a suitable vein.

Joseph Lewis Clark cried out "It don't work", as Ohio executioners struggled with a collapsed vein. Curtains were drawn to screen the procedure. Clark finally died nearly 90 minutes after the scheduled time.

California recently postponed indefinitely an execution over ethical issues surrounding lethal injections.

During Clark's execution at the Southern Ohio Correctional Facility in Lucasviiie, the team worked for about 25 minutes to find a vein in his right arm, the Associated Press reported.

At one point, a team member rolled up the leg of his trousers to try to find a suitable vein in his right leg, the agency said.

While the technicians tried to find a suitable site, Clark, 57, raised his head off the gurney and told them the procedure was not working.

US METHODS OF EXECUTION

Lethal injection: Authorised in 37 states
Electrocution: In 10 states (sole method in Nebraska) Gas chamber: In five states (all of which have lethal injection as alternative)
Hanging: Only in New Hampshire and Washington
Firing squad: In Idaho and Oklahoma
Source: DPIC

Curtains behind a glass panel separating him from the area where witnesses watched were drawn, before being reopened later so they could see him die.

Clark was reportedly heard moaning from behind the curtain.

Prisons spokeswoman Andrea Dean told AP that procedures called for inserting two intravenous lines to carry the lethal chemicals - one in each arm, with one operating as a back-up.

Technicians had finally gone ahead using just one site in Clark's left arm, she said, after determining a vein had collapsed.

"This has never happened," Ms Dean was quoted as saying of the delay.

Clark was pronounced dead at 1126 local time (1526 GMT) on Tuesday.

Court intervention

In February, the execution of killer Michael Morales was postponed indefinitely in California, after prison authorities failed twice within 24 hours to find qualified medics to administer the lethal injection.

Morales is now back on Death Row while the state reviews its policy on how to carry out lethal injections.

In January, the Supreme Court halted the execution of a man in Florida to consider whether chemicals used in lethal injections violated a constitutional ban on cruel and unusual punishment.

Lethal injection - which uses a cocktail of three drugs - is the most widely used method of execution in the US, although some inmates are offered the choice of alternatives like electrocution or the gas chamber.

Thirty-eight of the 50 US states and the federal government permit capital punishment.

Clark was sentenced to death after killing a petrol station attendant and a student during a series of robberies he carried out in 1984.

Ohio reintroduced the death penalty in 1999.

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Injection Problems Delay Ohio Execution

By ERICA RYAN Associated Press Writer
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LUCASVILLE: Ohio — Difficulty in setting up the lethal injection caused a delay of more than an hour in Tuesday's execution of a man convicted of killing a gas station clerk during a series of robberies.

Joseph Lewis Clark, 57, died at 11:26 a.m. at the Southern Ohio Correctional Facility. He was sentenced to die in November 1984 for killing David Manning.

The execution was set to begin at 10 a.m., but was delayed as the team worked to find a vein in his right arm to administer the injection. Clark said "they're not working" as the team tried to start the injection.

After 25 minutes of trying to find a vein, a curtain was pulled over the window separating witnesses from the area where the execution was to take place. Clark was heard moaning and groaning and when the curtain was reopened he had a shunt in one arm.

Prisons director Terry Collins said a vein in Clark's arm had collapsed and that Clark's history of drug use could have been a factor.

The team here is a very professional team. They're doing a very, very difficult job under difficult circumstances," Collins said.

Clark is the 21st man executed since Ohio resumed capital punishment in 1999.

He had confessed that he killed Manning, saying he was trying to get money for drugs. He also was sentenced to life in prison for killing a store clerk the day before Manning's death a part of the series of robberies that lasted over a week.

nbc4i.com

Man Executed After Difficulty Administering Injection

Clark's Appeal For Clemency Denied Last Week

UPDATED: 12:15 pm EDT May 2, 2006

LUCASVILLE, Ohio -- A man who killed two people and wounded another during a string of robberies to get money for drugs 22 years ago was executed by the state Tuesday morning, following a delay of more than an hour, prison officials said.

Joseph Clark, 57, was pronounced dead at 11:26 a.m. at the Southern Ohio Correctional Facility, prison officials said.

Clark died for killing David Manning, a 23-year-old gas station attendant. Manning was shot in January 1984, a day after Clark killed a convenience store worker during another robbery.

The execution was set to begin at 10 a.m. It was the longest delay since the state resumed executions in 1999, state prisons spokeswoman Andrea Dean said.

The execution was slowed as the execution team worked to find a vein in his right arm.

Clark said, "These don't work" and "They're not working" as the team tried to start the injection.

After 25 minutes of trying to find a vein, a curtain separating the death house from witnesses was pulled shut. Clark could be heard moaning and groaning from behind the curtain.

When the curtain reopened at 11:17 a.m., Clark had two shunts in his arm.

"This has never happened," prisons spokeswoman Andrea Dean said of the delay.

Clark was the 21st man executed since the state resumed capital punishment in 1999. He was sentenced to death in November 1984 for killing Manning and faced execution longer than all but 11 of the 193 men on death row.

Gov. Bob Taft rejected Clark's appeal for clemency last week, saying he found no justifiable basis for mercy. Clark confessed to police that he killed Manning, saying he was trying to get money for drugs. According to court records, Clark shot Manning in the chest after the clerk told him there was no money.

Manning, married just 10 weeks earlier, had two children from a previous marriage. His widow, Mary Ellen Manning Gordon, and his brothers

were expected to watch the execution.

Clark also was given a life sentence for killing convenience store clerk Donald Harris the day before killing Manning as part of the spree of robberies that lasted over a week. Clark was arrested three days after Manning's death after he shot and wounded a man withdrawing money from an automated teller machine,

He tried to hang himself in his jail cell after being arrested and spent several days being treated at a hospital, according to state parole board records.

"I guess God kept me alive then. He's been the one who has kept me strong all these years. I did what I had to do," Clark said in a March interview at the Ohio State Penitentiary in Youngstown.

He informed prison officials Tuesday morning that he did not want to see any visitors, including his attorney or spiritual adviser.

George Pappas, Clark's lawyer, in April urged the state parole board to recommend clemency.

"He's 57 years old, laid-back, soft-spoken, not aggressive," Pappas told the Ohio Parole Board on April 11. "He's not a threat to anybody. He's a different person than he was 22 years ago."

The parole board unanimously recommended against clemency.

In the March interview, Clark said he didn't intend to kill Manning. "He started coming toward me with something like a metal rod or something in his hand,"Clark said. "I sort of somehow squeezed the trigger off and shot him."

Clark arrived Monday at the Southern Ohio Correctional Facility, where the execution is to take place, from death row in Youngstown.

For his final dinner, Clark ate jumbo shrimp, a T-bone steak cooked medium well with A-1 steak sauce, fried chicken wings, french fries with ketchup, hot dinner rolls with butter, cherry pie and Pepsi.

Stay with **NBC 4** and nbc4i.com for additional information.

Inmate survives first execution

By Jim Leckrone in Columbus Ohio

A DOUBLE murderer was put to death in Ohio but not until after one of his veins had collapsed, causing the condemned man to sit up and tell his executioners, "It's not working", officials said.

The Ohio Department of Corrections said Joseph Clark, 57, was pronounced dead at 12.26am (AEST) following an injection of lethal chemicals at the Southern Ohio Correctional Institution in Lucasville.

Spokeswoman Andrea Dean said the execution was delayed about 90 minutes because technicians had trouble initially finding a site in Clark's arm for the intravenous line carrying the chemicals.

Then shortly after the poisons were supposed to have been pumping into his body, she said, he sat up saying: "It's not working. It's not working."

Officials determined that a vein had collapsed. Curtains were closed to block witnesses' view until technicians found a vein in his other arm. They were then parted to reveal him dying, witnesses said.

Ohio has used lethal injection repeatedly without similar problems, but this method of execution, used in all but one of the 38 US states that impose capital punishment, is under legal attack. The US Supreme Court has a challenge before it from Florida claiming

it causes undue pain, while the matter is also before a court in California.

The method involves three separate drugs: the first renders the victim unconscious, the second stops all muscle movement except the heart and the third stops the heart, causing death.

Clark was given a meal of his request yesterday, consisting of prawns, steak, chicken wings, chips, rolls with butter, cherry pie and a soft drink.

Just before the execution process started the first time Clark made a final statement apologising to his victims' families and saying: "Today my life is being taken because of drugs. If you 'live by the sword you die by the sword."

RENDERED: NOVEMBER 22, 2006
TO BE PUBLISHED

SUPREME COURT OF KENTUCKY
2005-SC-0543-MR

RALPH BAZE AND
THOMAS C. BOWLING — APPELLANTS

APPEAL FROM FRANKLIN CIRCUIT COURT
HONORABLE ROGER CRITTENDEN, JUDGE
2004-CI-1094

JONATHAN D. REES, COMMISSIONER
KENTUCKY DEPARTMENT OF CORRECTIONS;
GLENN HAEBERLIN, WARDEN KENTUCKY
STATE PENITENTIARY; AND
HON. ERNIE FLETCHER, GOVERNOR
OF KENTUCKY — APPELLEES

OPINION OF THE COURT BY JUSTICE WINTERSHEIMER

AFFIRMING

This appeal is from a decision of the circuit court denying relief sought by Baze and Bowling in the form of a declaratory judgment. This action was filed in accordance with CR 57, which outlines the procedure for obtaining a declaratory judgment pursuant to KRS 418.040.

The single issue is whether the lethal injection provisions for execution protocol violate or

threaten to violate the rights of Baze and Bowling to be free from cruel and unusual punishment.

Baze and Bowling argue that the lethal injection method is cruel and unusual punishment forbidden by the Eighth Amendment to the United States Constitution and Section 17 of the Kentucky Constitution. There are no questions in this case involving the guilt or convictions of either defendant. The recommendations by the jury of death sentences are also not in question. The only issue to be decided is the manner in which the Commonwealth of Kentucky will carry out the sentences on the convicted individuals.

Baze and Bowling were both convicted of double murders and each was sentenced to death. Both Bowling and Baze have completely exhausted all of the legitimate state and federal means for challenging their convictions and the propriety of the death sentences. Both have refused to select a method of execution as provided by KRS 431.220. The statutory option allows an inmate to choose electrocution or to submit to the default of lethal injection as punishment.

As background to this matter, we believe it is appropriate to recall briefly the underlying facts in each case. Baze was convicted by a jury of two murders for shooting two law enforcement officers three times in the back with an assault rifle when the officers were attempting to serve him with five felony fugitive warrants from Ohio. *See Baze v. Commonwealth*, 965 S.W.2d 817 (Ky. 1997). A jury convicted Bowling of the murders of a husband and

wife as they sat in their automobile in a parking lot outside a Lexington dry cleaning shop. *See Bowling v. Commonwealth*, 873 SW.2d 175 (Ky. 1994).

The trial judge on April 18, 2005, began a bench trial to determine the sole issue regarding the propriety of the lethal injection protocol. Seventeen depositions were presented and twenty witnesses were called to trial to testify including various Department of Corrections personnel, physicians, issues advocates and researchers. The trial ended on May 10. The trial judge issued his decision on July 8, 2005. This case comes to our Court as a matter of right.

I. Standard of Review

Pursuant to CR 57 and KRS 418.040, Baze and Bowling sought a declaratory judgment that the lethal injection method of execution violates their federal and state rights to be free from cruel and unusual punishment. *Wood v. Commonwealth*, 142 S.W.3d 24 (Ky. 2004), provides that in order to succeed, they must establish such constitutional violations by a preponderance of the evidence. Our review is *de novo* as to the conclusions of law. *Rehm v. Clayton*, 132 S.W.3d 864 (Ky. 2004).

A method of execution is considered to be cruel and unusual punishment under the Federal Constitution when the procedure for execution creates a substantial risk of wanton and unnecessary infliction of pain, torture or lingering death. *Gregg v. Georgia*, 428 U.S. 153, 96 S.Ct. 2909, 49 L.Ed.2d 859 (1976). In reviewing whether the method of execution is a constitutional violation, courts must

consider whether it is contrary to evolving standards of decency that mark the progress of a maturing society. *See Trop v. Dulles*, 356 U.S. 86, 78 S.Ct. 590, 2 L.Ed.2d 630 (1958). Prior interpretation of Section 17 of the Kentucky Constitution provides that a method of punishment is cruel and unusual if it shocks the moral sense of all reasonable men as to what is right and proper under the circumstances. *See Weber v. Commonwealth*, 303 Ky. 56, 196 S.W.2d 465 (1946); *See also Weems v. U.S.*, 217 U.S. 349, 30 S.Ct. 544, 54 L.Ed. 793 (1910).

Circuit Court Decision

This action is a declaratory judgment and the standard of review on appeal is that which is used in a civil matter. CR 52.01 has long held that matters of fact tried before a judge without a jury are to be reviewed under the clearly erroneous standard. The rule provides in pertinent part that findings of fact shall not be set aside unless clearly erroneous and due regard shall be given to the opportunity of the trial court to judge the credibility of the witnesses. *See Largent v. Largent*, 643 S.W.2d 261 (Ky. 1982).

A careful review of this matter indicates there is no reason to believe that the circuit judge was clearly erroneous in any of his findings of fact. They are supported by substantial evidence. Consequently, the decision of the trial judge was not clearly erroneous nor was there any abuse of discretion. Thus, the reviewing court should not substitute its opinion for that of the trier of fact in the absence of clear error.

After an extensive bench trial in which the judge received evidence at length and recognized the arguments and briefs of the parties, the circuit judge denied the relief sought. He concluded that the lethal injection protocol is in conformity with KRS 431.220. The protocol provides for a continuous administration of the lethal injection chemicals and that the argument to the contrary is predicated on a very strained interpretation of the "continuous administration" language of the statute.

A brief summary of the findings and conclusions of the trial judge follows:

1) Baze and Bowling have not demonstrated by a preponderance of the evidence that the method of execution by lethal injection deviates from contemporary norms and societal standards in regard to capital punishment. *Cf. State of Connecticut v. Webb*, 750 A.2d 448, 457 (Conn. 2000), which states in part that of the 38 states permitting capital punishment approximately 34 have adopted lethal injection and have done so because it is universally recognized as the most humane method of execution and the least apt to cause unnecessary pain.

2) There has been no demonstration by a preponderance of the evidence that the method of execution in Kentucky by lethal injection offends the dignity of the prisoners and society as a whole.

3) Baze and Bowling have not demonstrated by a preponderance of evidence that the method of execution by lethal injection in Kentucky inflicts unnecessary physical pain.

Evidence was considered that other drugs were available that may decrease the possibility of pain but the constitutional provisions do not provide protection against all pain, only cruel and unusual punishment. Although alleged that there are other drugs which may further assure the condemned person feels no pain, there is no requirement to select the least severe penalty so long as the penalty is not cruel or unusual. *See Gregg, supra.*

4) It has not been demonstrated by a preponderance of the evidence that the method of execution in Kentucky by lethal injection inflicts unnecessary psychological suffering.

5) It has not been demonstrated by a preponderance of the evidence that the method of legal injection in Kentucky is so inept that it deprives the parties of due process and fundamental fairness. In the event of a possible stay, the Kentucky method recognizes the necessary steps for revival sufficient to satisfy the due process rights of the convicted parties.

6) The circuit judge concluded that the preponderance of the evidence indicates that the procedure which attempts to insert an intravenous catheter into the neck through the carotid artery or jugular vein does create a substantial risk of wanton and unnecessary infliction of pain and that only that portion of the legal injection protocol was stricken as violating the safeguards against cruel and unusual punishment. The Department of Corrections has since amended its previous protocol to meet the directions of the circuit court.

II. History of Execution in Kentucky

Prior to 1998, executions within the Commonwealth were conducted pursuant to the then authorized method of electrocution. KRS 431.220. The current version of that statute provides for lethal injection as the primary means of execution. KRS 431.220(1)(a). Prisoners sentenced to death prior to the effective date of the current version of the statute are granted the option of selecting the previous method of electrocution. KRS 431.220(1)(b). Should the prisoner refuse to elect an option, lethal injection will be utilized as the default method of execution. *Id.*

It is not the role of this Court to investigate the political, moral, ethical, religious, or personal views of those on each side of this issue. The Legislature has given due consideration to these matters. We are limited in deciding only whether the method defined by the Legislature and signed into law by the Executive, survives constitutional review. Baze and Bowling must establish by a preponderance of the evidence that the methods of execution result in a constitutional violation. *Woods v. Commonwealth*, 142 S.W.3d 24 (Ky. 2004).

We must examine the methods and consider whether they are contrary to evolving standards of decency that mark the progress of a maturing society. *Trop v. Dulles*, *supra*. Any method of punishment is cruel and unusual if it shocks the moral sense of reasonable men as to what is right and proper under the circumstances. *Weber v. Commonwealth*, *supra*. Our guidelines include

whether the method comports with the contemporary norms and standards of society; whether it offends the dignity of the condemned or society; and whether it inflicts unnecessary physical pain or psychological suffering. *Weems v. United States*, *supra*. The method of execution must not create a substantial risk of wanton or unnecessary infliction of pain, torture or lingering death. *Gregg v. Georgia*, *supra*.

III. Electrocution as a Method of Execution

We have previously examined electrocution as a method of execution and found it did not rise to the level of unconstitutional punishment. *Smith v. Commonwealth*, 734 S.W.2d 437 (Ky. 1987); *Sanders v. Commonwealth*, 801 S.W.2d 665 (Ky. 1990); *Perdue v. Commonwealth*, 916 S.W.2d 148 (Ky. 1995); *Bowling v. Commonwealth*, 942 S.W.2d 293 (Ky. 1997); *Foley v. Commonwealth*, 942 S.W.2d 876 (Ky. 1996); *McQueen v. Parker*, 950 S.W.2d 226 (Ky. 1997). Based on a review of a number of executions within different jurisdictions, we find no reason to change the view that electrocution remains a constitutionally viable method of execution.

IV. Lethal Injection as a Method of Execution

We have previously examined lethal injection as a method of execution and held it did not violate the constitutional standards prohibiting cruel and unusual punishment. *Wheeler v. Commonwealth*, 121 S.W.3d 173 (Ky. 2003). We have no reason to depart from the position set out in that case. The protocol for lethal injection execution begins with the availability of a therapeutic dose of diazepam if it is requested. Diazepam, commonly referred to as

Valium, is an anti-anxiety agent used primarily for the relief of anxiety and associated nervousness and tension. Certified phlebotomists and emergency medical technicians are allowed up to an hour to then insert the appropriate needles into the arm, hand, leg or foot of the inmate.

Three grams of sodium thiopental, commonly referred to as Sodium Pentathol, are then injected. This drug is a fast acting barbiturate that renders the inmate unconscious. At this level of ingestion the person is rendered unconscious for hours. The line is then flushed with 25 milligrams of a saline solution to prevent adverse interaction between the drugs.

Fifty milligrams of pancuronium bromide, commonly referred to as Pavulon, follows. This drug causes paralysis. The purpose is to suspend muscular movement and to stop respiration or breathing. The line is again flushed with 25 milligrams of a saline solution to again prevent any adverse interaction between the drugs.

Finally, 240 milligrams of potassium chloride is injected. This chemical disrupts the electrical signals required for regular heart beat and results in cardiac arrest. An electrocardiogram verifies the cessation of heart activity. A doctor and a coroner then verify the cause of death.

The Eighth Amendment to the United States Constitution and Section 17 of the Kentucky Constitution both forbid cruel and unusual punishment. The use of three grams of sodium thiopental, commonly referred to as Sodium

Pentathol, renders the condemned unconscious. The prohibition is against cruel punishment and does not require a complete absence of pain. Conflicting medical testimony prevents us from stating categorically that a prisoner feels no pain.

Eddie Lee Harper was the first and only convicted killer to be executed under the lethal injection protocol of Kentucky. Evidence presented by Department of Corrections personnel present at the execution indicates that Harper went to sleep within 15 seconds to one minute from the moment that the warden began the execution and never moved or exhibited any pain whatsoever subsequent to losing consciousness. *Cf. Harper v. Commonwealth*, 694 S.W.2d 665 (Ky. 1985).

In addition, state and federal courts have regularly rejected arguments that lethal injection as a method of execution is cruel and unusual. *See e.g. LaGrand v. Lewis*, 883 F.Supp. 469 (D.Ariz. 1995), affirmed 133 F.3d 1253 (9th Cir. 1998); *Sims v. State*, 754 So.2d 657 (Fla. 2000); *State v. Webb*, *supra*; *Moore v. State*, 771 N.Ed.2d 46 (Ind. 2002); *Spencer v. Commonwealth*, 385 S.E.2d 850 (Va. 1989).

The lethal injection method used in Kentucky is not a violation of the Eighth Amendment to the United States Constitution or Section 17 of the Kentucky Constitution's ban on cruel and unusual punishment.

Baze and Bowling have not met their burden of proof by a preponderance of the evidence as necessary in a declaratory judgment action. The

findings of fact by the trial judge are not clearly erroneous. The conclusions of law are correct.

The judgment of the circuit court is affirmed.

Lambert, C.J., Graves, Minton and Scott concur together with Special Justices Adams and Revell. Justices McAnulty and Roach, JJ., not sitting.

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ERNIE FLETCHER
GOVERNOR

COMMONWEALTH OF KENTUCKY
JUSTICE AND PUBLIC SAFETY CABINET
OFFICE OF LEGAL SERVICES
www.justice.ky.gov

LT. GOV. STEPHEN B. PENCE
SECRETARY

August 3, 2004

Mr. David M. Barron
Assistant Public Advocate
Department of Public Advocacy
Capital Post Conviction, Suite 301
Frankfort, KY 40601

RE: Open Records Request (Rcvd. 7/19/04) Execution Protocol for Lethal Injection

Dear Mr. Barron:

This is a final response to your above-referenced open records request by letter dated 7/16/2004 in which you request access to public records as set forth below. For convenience of reference, I have responded each of your 47 items separately.

1. a complete copy of the "execution procedures," policies, and guidelines utilized during lethal injections in Kentucky or related in any way to any and all aspects of Defendants' (sic.) lethal injection procedure, including any changes or modifications and the reasons for such changes and any documents that are no longer in use;[1]

As indicated in my prior letter to you dated 7/26/04, Corrections Policy & Procedure (CPP) 9.5 addresses the subject of inmate execution. I previously indicated that pre-payment for a copy of this policy would be required. However, on Thursday morning, 7/29/04, DPA Attorney Theodore S. Shouse came to my office unannounced expecting to review the execution protocol in response to this request. At that time, I provided Mr. Shouse a copy of the 3-page policy relative to inmate executions free of charge, and Mr. Shouse assured me he would deliver this record to you.

[1] For purposes of responding to your letter, I will assume your use of "Defendants" means the Kentucky Dept. of Corrections and the Kentucky State Penitentiary.

I do not possess a copy of the execution protocol or any other guidelines for the administration of execution by lethal injection. An execution protocol exists at the Kentucky State Penitentiary (hereinafter "the Penitentiary" or "KSP"), however, this record is exempt from disclosure pursuant to KRS 61.878(1)(i), since the protocol is a preliminary document. The execution protocol is subject to internal review and revision as needed, in preparation for and following the administration of an execution. The execution protocol also constitutes an internal memorandum in which KSP policies relative to safety and security measures necessary to carry out an order of execution are formulated pursuant to KRS 61.878(1)(j). Finally, pursuant to KRS 61.878(1)(l) and KRS 197.025(1), KSP Warden Glenn Haeberlin will not authorize release of the execution protocol in response to an open records request for safety and security reasons. Disclosure of the execution protocol constitutes a threat to the safety and security of the Penitentiary, inmates and correctional staff who work there, due to the potential for inmates to organize a riot, retaliate against staff, or otherwise attempt to disrupt the protocol in the event an execution is ordered. Additionally, disclosure of the protocol may subject Corrections' employees to harassment from individuals in an employee's community who are opposed to capital punishment. I discussed these security concerns in a telephone conversation with your manager, Susan Balliet, on Tuesday, 7/27/04 and also with Mr. Shouse on 7/29.

2. the drugs administered during lethal injection in Kentucky, the dose of these drugs, and the order as to which the drugs are administered;

KSP Warden Glenn Haeberlin has authorized the release of this information as it is contained in the execution protocol and has been previously provided to DPA. A therapeutic dose of Valium is given one hour and thirty minutes prior to the execution. Thereafter, lethal injection drugs are administered by injection in rapid succession A-E in the order as follows:

A.	Sodium Thiopental	2 gm
B.	Saline	25 mg
C.	Pavulon	50 mg
D.	Saline	25 mg
E.	Potassium Chloride	240 meq

3. the number of needles inserted into the inmate;

As with the response to # 2 above, Warden Haeberlin has authorized the release of this information. A minimum of one needle is inserted in the inmate. Additional needles may be used if considered necessary by the execution team.

4. whether the chemicals or dosage of the chemicals has ever changed, and if so, the reason for the changes and what changes were made;

Please be advised that there is no public record maintained by the Department of Corrections responsive to your request. You have made a request for research. The Kentucky Open Records Act does not require public agencies to carry out research or compile information to conform to a given request. See OAG 89-45. The Attorney General has also determined that a

public agency cannot afford a requester access to a record that it does not have or which does not exist. 99-ORD-98; 99-ORD-150; 04-ORD-043. Requests for information are outside the scope of the open records law, meaning that a public agency is not obligated to honor a request for information under the law. 02-ORD-88; KRS 61.870 *et seq.*

5. the chemicals, order the chemicals were administered, and the dosage of the chemicals utilized during the execution of Edward Harper on May 25, 1999;

Warden Haeberlin has authorized the release of this information. Please see response to # 2 above.

6. any and all documents concerning invasive or non-invasive procedures, medical or otherwise, utilized to obtain venous access should any difficult (sic.) be anticipated prior to the execution or occur during the execution;

See response to # 1 above relative to hon-disclosure of the execution protocol.

7. any and all documents concerning the monitoring of the inmate during the execution to determine if the inmate is adequately sedated and 2) to determine if the inmate's heart is beating;

See response to # 1 above relative to non-disclosure of the execution protocol.

8. the methods for obtaining storing, mixing, and appropriately labeling the drugs, the minimum qualifications and expertise required for the person who will determine (have determined) the concentration and dosage of each drug to administer, and the criteria that shall be used in exercising this discretion;

See response to # 4 above.

9. the manner in which the IV tubing, three-way valve, saline solution and other apparatus shall be modified or fixed in the event it is malfunctioning during the execution process, the minimum qualifications and expertise required of the person who shall have the discretion to decide to attempt such action, and the criteria that shall be used in exercising this discretion;

See response to # 4 above.

10. the manner in which the heart monitoring system shall be modified or fixed in the event it is malfunctioning during the execution process, the minimum qualifications and expertise required of the person who shall have the discretion to decide to attempt such action, and the criteria that shall be used in exercising this discretion;

See response to # 4 above.

11. the manner in which the IV catheters shall be inserted into the condemned prisoner, the minimum qualifications and expertise required of the person who is given the responsibility and discretion to decide when efforts at inserting the IV catheters should be abandoned and the cut down procedure begun, and the criteria that shall be used in exercising this discretion;

See response to # 4 above.

12. the manner in which the condition of the condemned prisoner shall be monitored to ensure that the administration of lethal injection chemicals reach the inmate's bloodstream;

See response to # 4 above.

13. the manner in which the condition of the condemned inmate will be monitored to ensure that a plane of unconsciousness has been established prior to proceeding to the injection of pancurium bromide, and similarly, prior to the injection of potassium chloride;

See response to # 4 above.

14. the manner in which the condition of the condemned prisoner will be monitored to confirm that proceeding to the next procedure would not inflict severe and unnecessary pain and suffering on the condemned prisoner;

See response to # 4 above.

15. the minimum qualifications and expertise required of the person who is given the responsibility and discretion to order the staff to divert from the established protocols if necessary to avoid inflicting severe and unnecessary pain and suffering on the condemned prisoner, and the criteria that shall be used in exercising this discretion;

See response to # 4 above.

16. the minimum qualifications and expertise required of the person who is given the responsibility and discretion to insure that appropriate procedures are followed in response to unanticipated problems or events arising during the legal injection procedure, and the criteria that shall be used in exercising this discretion;

See response to # 4 above.

17. all documentation related to Defendants' (sic.) decision to adopt pancurium bromide as a chemical to be administered during lethal injection and all

documents suggesting the use of pancurium may mask external, physical indications of pain being experienced during execution;

There are no public records responsive to your request.

18. all documentation reflecting when Defendants (sic.) became aware that pancurium bromide was banned as an acceptable drug for use by veterinarians in the euthanasia of household pets;

There are no public records responsive to your request.

19. the training (medical and non-medical), minimum qualifications, and experience required for the different personnel performing the tasks involved in lethal injections at the Capital Punishment Facility on the day of execution, and also during any preparation for an execution by lethal injection, including, but not limited to:
    a. any executioners present;
    b. any nurses present;
    c. any physicians present;
    d. any physician's assistants present; and
    e. any emergency medical technicians present.

See response to # 4 above. The training and minimum qualifications of executioners, nurses, physicians, physicians' assistants, and emergency medical technicians will not be released to protect the identity of persons involved, for safety and security reasons set forth in item #1.

20. the names, present duty assignments within the department, and the last known addresses for all individuals mentioned in 19;

See response to # 4 above. In addition, employees' home addresses will not be released in response to an open records request, because release of this information constitutes an unwarranted invasion of personal privacy pursuant to KRS 61.878(1)(a). Finally, the names and present duty assignments of Corrections' employees involved in an execution will not be released, since release of this information will endanger the safety of these individuals at work and potentially subject them to public harassment pursuant to KRS 61.878(1)(l) and KRS 197.025(1).

21. the manner in which the Kentucky Department of Corrections selects executioners for lethal injections;

See response to # 4 above.

22. the identity of the "Deputy Commissioner" and copies of any and all documents pertaining to his/her medical training, knowledge, and qualifications in the administration of lethal injection;

There are several Deputy Commissioners in the Dept. of Corrections. See response to # 4 before with respect to requests requiring research and items #19 and #20 with respect to privacy and safety concerns for Corrections' employees.

23. copies of any and all documents pertaining to Warden Glenn Haeberlin's medical training, knowledge, and training and experience in the administration of lethal injection;

KSP Warden Glenn E. Haeberlin's execution training record, consisting of 8 pages, will be disclosed to you upon pre-payment of fees for copies as set forth below. . Please note these records do not document all execution training Warden Haeberlin has completed, only those training sessions he chose to report for purposes of meeting ACA training standards. I have redacted Warden Haeberlin's social security number and date of birth from these records, pursuant to KRS 61.878(1)(a), since public disclosure of this information would constitute an unwarranted invasion of personal privacy.

24. copies of any and all documents pertaining to the former Warden Phil Parker's credentials, experience, and training involving the administration of lethal injection;

Former KSP Warden Philip W. Parker's execution training record, consisting of 2 pages, will be disclosed to you upon pre-payment of fees for copies as set forth below. I have redacted Warden Parker's social security number and date of birth from these records, pursuant to KRS 61.878(1)(a), since public disclosure of this information would constitute an unwarranted invasion of personal privacy. As with Warden Haeberlin's records, these documents may not constitute all execution training completed by Philip Parker.

25. copies of any and all documents pertaining to the credentials, experience, and training involving the administration of lethal injection for the Warden at the capital punishment facility when Edward Harper was executed in 1999;

See response to # 23 above.

26 any medical licenses or medical training held by any individuals involved in carrying out a lethal injection in Kentucky in the past or in the future, the date of the license(s) were issued, and by whom the license(s) were issued;

See response to # 4 above. In addition, to the extent any individual involved in carrying out a lethal injection has a medical license or medical training record, these records will not be released, because release of this information constitutes an unwarranted invasion of personal

privacy pursuant to KRS 61.878(1)(a). Finally, the records you request will not be released in response to an open records request, since release of this information will identify the individuals involved in the execution procedure, endangering the safety of these individuals at work and potentially subject them to public harassment pursuant to KRS 61.878(1)(l) and KRS 197.025(1).

27. any licenses held by an EMT involved in carrying out a lethal injection, the date the licenses were issued, and by whom the licenses were issued;

See response to # 26 above.

28. the physical location of the physician during an execution;

See response to # 1 above.

29. the name, last known address, and Department of Corrections affiliation and any non-Department of Corrections affiliation of all official witnesses to a lethal injection in Kentucky since the beginning of 1998- specifying which execution the witness observed – along with any and all writings and documents by these witnesses pertaining to the execution they observed;

See response to # 4 above. In addition, home addresses of official witnesses to a lethal injection, to the extent the Dept. of Corrections has this information, will not be released in response to an open records request, because release of this information constitutes an unwarranted invasion of personal privacy pursuant to KRS 61.878(1)(a). Finally, release of this information may also endanger the safety of these individuals at work and potentially subject them to public harassment pursuant to KRS 61.878(1)(l) and KRS 197.025(1).

30. the date in which the current lethal injection machinery was designed;

See response to # 4 above.

31. all writings, documents, or schematic wiring diagrams, relied upon in designing the original lethal injection process in Kentucky;

There are no public records responsive to your request.

32. all writings or documents relied upon in making any changes, modifications, or repairs to the lethal injection procedure or equipment;

There are no public records responsive to your request.

33. names and last known addresses of all medical professionals, vendors, subcontractors, and prisoners who were involved in designing and/or repairs of the lethal injection equipment or machinery;

See responses to # 4 and # 29 above.

34. any and all writings or documents reflecting consultations with Fred Leuchter concerning lethal injection equipment, machinery, or lethal injection protocols utilized in Kentucky from the beginning of 1998 to the present including the procedure utilized during the execution of Edward Harper in 1999;

There are no public records responsive to your request.

35. any and all writings or documents pertaining to how the lethal injection equipment is tested to ensure proper functioning;

See response to # 1 above.

36. the date when the lethal injection equipment was last tested to ensure proper functioning along with all writings and documents concerning any and all tests conducted on lethal injection equipment from the beginning of 1998 to the present;

See responses to # 1 and # 4 above.

37. the name, last known address, and Department of Corrections and non-Department of Corrections affiliation of any individuals who have to will test the lethal injection equipment to ensure proper functioning;

See responses to # 4 and # 29 above.

38. any and all documents and writing concerning execution protocols from other states that were reviewed in creating Kentucky's lethal injection protocol, and identification of which state's protocols were reviewed and a copy of these protocols;

There are no public records responsive to your request.

39. the names, last known addresses, and Department of Correction and non-Department of Corrections affiliation of all individuals who physically inspected or observed lethal injection equipment in other states and copies of any writings or documents concerning these inspections or observations conducted in preparing or modifying Kentucky's protocol for lethal injection;

See responses to # 4 and # 29 above.

40. any and all writings, instructions, or protocols regarding the manner in which the lethal injection equipment shall be modified or fixed in the event of its malfunctioning during the execution process, the minimum qualifications and

expertise required of the person who shall have the discretion to decide to attempt such action, and the criteria that shall be used in exercising this discretion;

See response to # 1 above.

41. any and all writings or documents concerning any unanticipated problems or malfunctions that occurred during any training or preparation of the execution team ("dry runs") for lethal injection in Kentucky along with the name, and last known address for all individuals who wrote such documents, and all official witnesses who observed the problems or malfunctions;

See responses to # 1, # 4 and # 29 above.

42. any and all writings or documents concerning any unanticipated problems or malfunctions that occurred during the execution of Edward Harper in 1999, including all documentation pertaining to inserting the needle(s) along with the name, and last known address for all individuals who wrote such documents, and all officials witnesses who observed the problems or malfunctions;

There are no public records responsive to your request.

43. copies of any and all documents concerning post-execution photographs of the condemned inmate and post mortem examinations performed on individuals executed by lethal injection by the Commonwealth of Kentucky including autopsy narrative reports, notes, diagrams, photos, and toxicology studies for the following individual:

1. Edward Harper Executed on May 25, 1999

There is a six-page post mortem examination report on Edward Lee Harper subject to release upon pre-payment for copies. You may already have received a copy of this report in response to your request to the State Medical Examiner's Office.

44. any and all writings or documents concerning all executions by lethal injection in Kentucky where the condemned inmate either was or appeared to be conscious after the administration of sodium thiopental (pentothal);

There are no public records responsive to your request.

45. any and all writings or documents concerning all executions by lethal injection in Kentucky where the condemned inmate either was or appeared to be alive after the first cycle of lethal drugs were administered;

There are no public records responsive to your request.

46. all reports prepared by the Warden or on behalf of the Warden concerning the execution of Edward Harper on May 25, 1999 including any and all pre execution documents concerning the execution, checklists or documents compiled during the executions, and all after execution documents;

To the extent records responsive to this request exist, these records are exempt from disclosure as notes pursuant to KRS 61.878(1)(i).

47. the names, Department of Correction affiliation, of all Department of Corrections employees who worked at the Kentucky State Penitentiary on May 25, 1999 along with the times these employees worked on that day, and hourly wage that was paid to the employee for their work on May 25, 1999.

See responses to # 4 and # 29 above.

In accordance with CPP 6.1 and Justice & Public Safety Cabinet policy, the Department of Corrections will require pre-payment for copies of the records responsive to your request. This may be arranged by inter-account transfer between the Department of Public Advocacy and Department of Corrections. Upon receipt of payment in the amount of $1.40, the public records identified above, specifically the 8 pages of records documenting training completed by Wardens Glenn Haeberlin and Philip Parker and the 6-page Post-mortem examination of Edward Lee Harper, will be provided to you.

Sincerely yours,

Emily Dennis

EMILY DENNIS, Staff Attorney

Cc: George Million
Glenn E. Haeberlin
Luke Morgan

Kentucky Division of Corrections Training

Employee Training Application

Please PRINT the following information

Social Security Number	[redacted]
NAME	PHILIP (First) W (Initial) BARKER (Last)
JOB TITLE	WARDEN
EMPLOYING AGENCY	KSP Hire Date: 7 1 1 78
DATE OF BIRTH	month/day/year: [redacted]
SEX	Check one: ☒ Male ☐ Female
Course Title	EMERGENCY PREPAREDNESS / EXECUTION
Training Site	KSP
Beginning Date	6/2/97
Ending Date	6/3/97
Training Hours	8
Other Course Information	
Applicant's Signature	[signature]

Weapons Requalification Applicants only:

I certify that I have read the USE OF FORCE Booklet and the WEAPONS: USE, CARE and SAFETY Booklet which was issued to me this year.

Applicant's Signature _____ Date _____

Official Use Only

Comments:

The above applicant ☒ has ☐ has NOT successfully completed the above training program.

Authorizing Signature [signature] Date June 10, 1997

Scores

Academy WK 1 _____
Academy WK 2 _____
Academy WK 3 _____

Revolver _____
Shotgun _____
Mini-14 _____
Frms Test _____

SFA _____
CPR _____
Other _____
Other _____

BEST AVAILABLE COPY

Kentucky Division of Corrections Training

Employee Training Application

Please PRINT the following information

Social Security Number	[redacted]
NAME	(First) PHILIP (Initial) W (Last) PARKER
JOB TITLE	WARDEN
EMPLOYING AGENCY	KSP Hire Date: 7 / 1 / 78
DATE OF BIRTH	month/day/year: [redacted]
SEX	Check one: ☑ Male ☐ Female
Course Title	Execution Training
Training Site	KSP
Beginning Date	January
Ending Date	December
Training Hours	24
Other Course Information	
Applicant's Signature	[signature]

Weapons Requalification Applicants only:

I certify that I have read the USE OF FORCE Booklet and the WEAPONS: USE, CARE and SAFETY Booklet which was issued to me this year.

Applicant's Signature Date

RECEIVED
PERSONNEL OFFICE
FEB 1 2001
KY State Penitentiary

Official Use Only

Comments:

The above applicant ☑ has ☐ has NOT successfully completed the above training program.

Authorizing Signature [signature] Date 1/30/01

Scores

Academy WK 1 _____
Academy WK 2 _____
Academy WK 3 _____

Revolver _____
Shotgun _____
Mini-14 _____
Frms Test _____

SFA _____
CPR _____
Other _____
Other _____

Rev 1/98

Kentucky Division of Corrections Training

Employee Training Application

Please PRINT the following information

Social Security Number	[redacted]
NAME	(First) Glenn (Initial) E. (Last) Haeberlin
JOB TITLE	Warden
EMPLOYING AGENCY	KSP Hire Date: 7/28/75
DATE OF BIRTH	month/day/year: [redacted]
SEX	Check one: ☒ Male ☐ Female

Course Title	Execution Training
Training Site	KSP
Beginning Date	10-22-03
Ending Date	10-22-03
Training Hours	2
Other Course Information	
Applicant's Signature	J. E. Haeberlin

RECEIVED
P[illegible] OFFICE
OCT 2 8 2003
[illegible] STATE
PENITENTIARY

Weapons Requalification Applicants only:

I certify that I have read the USE OF FORCE Booklet and the WEAPONS: USE, CARE and SAFETY Booklet which was issued to me this year.

Applicant's Signature Date

Official Use Only

Comments:

The above applicant ☒ has ☐ has NOT successfully completed the above training program.

Authorizing Signature [signature] Date 10/27/03

Scores

Academy WK 1 ____	Revolver ____	SFA ____
Academy WK 2 ____	Shotgun ____	CPP ____
Academy WK 3 ____	Mini-14 ____	Other ____
	Firms Test	Other

Kentucky Division of Corrections Training

Employee Training Application

Please PRINT the following information

Social Security Number	[redacted]
NAME	(First) Glenn (Initial) E. (Last) Haeberlin
JOB TITLE	Warden IV
EMPLOYING AGENCY	KSP Hire Date: 7/25/75
DATE OF BIRTH	month/day/year: [redacted]
SEX	Check one: ☒ Male ☐ Female
Course Title	Execution Training
Training Site	KSP
Beginning Date	3-20-03
Ending Date	3-20-03
Training Hours	2
Other Course information	
Applicant's Signature	G. E. Haeberlin

Weapons Requalification Applicants only:

I certify that I have read the USE OF FORCE Booklet and the WEAPONS: USE, CARE and SAFETY Booklet which was issued to me this year.

Applicant's Signature Date

Official Use Only

Comments:

The above applicant ☑ has ☐ has NOT successfully completed the above training program.

Authorizing Signature Joe H. Stuart Date 3/21/03

Scores

Academy WK 1 ____	Revolver ____	SFA ____
Academy WK 2 ____	Shotgun ____	CPR ____
Academy WK 3 ____	Mini-14 ____	Other ____
	Firms Test	Other

Kentucky Division of Corrections Training

Employee Training Application

Please PRINT the following information

Social Security Number	[redacted]
NAME	(First) Glenn (Initial) E (Last) Haeberlin
JOB TITLE	Warden IV
EMPLOYING AGENCY	KSP Hire Date: 7/25/75
DATE OF BIRTH	month/day/year: [redacted]
SEX	Check one: ☒ Male ☐ Female
Course Title	Execution Training
Training Site	KSP
Beginning Date	2-19-03
Ending Date	2-19-03
Training Hours	2
Other Course information	
Applicant's Signature	J.E. Haeberlin

Weapons Requalification Applicants only:

I certify that I have read the USE OF FORCE Booklet and the WEAPONS: USE, CARE and SAFETY Booklet which was issued to me this year.

Applicant's Signature Date

Official Use Only

Comments:

The above applicant ☒ has ☐ has NOT successfully completed the above training program.

Authorizing Signature Joe H. Stuart Date 2/20/03

Scores

Academy WK 1 ____	Revolver ____	SFA ____
~~Academy WK 2~~ ____	Shotgun ____	CPR ____
Academy WK 3 ____	Mini-14 ____	Other ____
	Firms Test	Other

Kentucky Division of Corrections Training

Employee Training Application

Please PRINT the following information

Social Security Number	[redacted]
NAME	(First) Celenn (Initial) E. (Last) Haeberlin
JOB TITLE	Warden IV
EMPLOYING AGENCY	KSP Hire Date: 7 1 25 75
DATE OF BIRTH	month/day/year: [redacted]
SEX	Check one: ☒ Male ☐ Female
Course Title	Execution Training
Training Site	KSP
Beginning Date	1-14-03
Ending Date	1-14-03
Training Hours	2
Other Course information	
Applicant's Signature	J. E. Haeberlin

Weapons Requalification Applicants only:

I certify that I have read the USE OF FORCE Booklet and the WEAPONS: USE, CARE and SAFETY Booklet which was issued to me this year.

Applicant's Signature Date

Official Use Only

Comments:

The above applicant ☒ has ☐ has NOT successfully completed the above training program.

Authorizing Signature Joe H. Straat Date 1/15/03

Scores

Academy WK 1 ____	Revolver ____	SFA ____
Academy WK 2 ____	Shotgun ____	CPR ____
Academy WK 3 ____	Mini-14 ____	Other ____
	Firms Test	Other

Kentucky Division of Corrections Training

Employee Training Application

Please PRINT the following information

Social Security Number	[redacted]
NAME	(First) Glenn (Initial) E (Last) Haeberlin
JOB TITLE	Warden
EMPLOYING AGENCY	KSP Hire Date: 7/28/75
DATE OF BIRTH	month/day/year: [redacted]
SEX	Check one: ☒ Male ☐ Female
Course Title	Execution Team Training
Training Site	KSP
Beginning Date	9-19-02
Ending Date	9-19-02
Training Hours	2.5 hrs
Other Course information	
Applicant's Signature	G. E. Haeberlin

Weapons Requalification Applicants only:

I certify that I have read the USE OF FORCE Booklet and the WEAPONS: USE, CARE and SAFETY Booklet which was issued to me this year.

Applicant's Signature _____ Date _____

Official Use Only

Comments:

The above applicant ☐ has ☐ has NOT successfully completed the above training program.

Authorizing Signature Joseph L. Stuart Date 10/8/02

Scores

Academy WK 1 ____
Academy WK 2 ____
Academy WK 3 ____

Revolver ____
Shotgun ____
Mini-14 ____
Firms Test ____

SFA ____
CPR ____
Other ____
Other ____

Rev 1/95

Kentucky Division of Corrections Training

Employee Training Application

Please PRINT the following information

Social Security Number	[redacted]
NAME	(First) Glenn (Initial) E (Last) Haeberlin
JOB TITLE	Warden
EMPLOYING AGENCY	KSP Hire Date: 7/28/75
DATE OF BIRTH	month/day/year: [redacted]
SEX	Check one: ☒ Male ☐ Female
Course Title	Execution Team Training
Training Site	KSP
Beginning Date	8-9-02
Ending Date	8-9-02
Training Hours	2.5hrs
Other Course information	
Applicant's Signature	G. E. Haeberlin

Weapons Requalification Applicants only:

I certify that I have read the USE OF FORCE Booklet and the WEAPONS: USE, CARE and SAFETY Booklet which was issued to me this year.

Applicant's Signature Date

Official Use Only

Comments:

The above applicant ☐ has ☐ has NOT successfully completed the above training program.

Authorizing Signature Joe H. Stuart Date 10/8/02

Scores

Academy WK 1 ____	Revolver ____	SFA ____
Academy WK 2 ____	Shotgun ____	CPR ____
Academy WK 3 ____	Mini-14 ____	Other ____
	Firms Test ____	Other ____

Rev 1/95

Kentucky Division of Corrections Training

Employee Training Application

Please PRINT the following information

Social Security Number	[redacted]
NAME	(First) Glenn (Initial) E. (Last) HAEBERLIN
JOB TITLE	Deputy Warden
EMPLOYING AGENCY	Ky. St. Pen. Hire Date: 10/15/85
DATE OF BIRTH	month/day/year: [redacted]
SEX	Check one: ☒ Male ☐ Female
Course Title	Alabama Execution (See Attached)
Training Site	Holman Prision, Atmore Al.
Beginning Date	6/5/97
Ending Date	6/6/97
Training Hours	8.0
Other Course Information	
Applicant's Signature	Glenn Haeberlin

Weapons Requalification Applicants only:

I certify that I have read the USE OF FORCE Booklet and the WEAPONS: USE, CARE and SAFETY Booklet which was issued to me this year.

Applicant's Signature _____ Date _____

Official Use Only

Comments:

The above applicant ☒ has ☐ has NOT successfully completed the above training program.

Authorizing Signature Kenneth Lee Date 7/4/1997

Scores

Academy WK 1 _____	Revolver _____	SFA _____
Academy WK 2 _____	Shotgun _____	CPR _____
Academy WK 3 _____	Mini-14 _____	Other _____
	Frms Test: _____	Other _____

COMMONWEALTH OF KENTUCKY
Kentucky State Penitentiary

Adult Corrections
502/388-2211

P. O. Box 128
Eddyville, KY 42038-0128

MEMORANDUM

TO: Mike King, Executive Director
Division of Corrections Training

FROM: Glenn E. Haeberlin, Deputy Warden/Programs
Kentucky State Penitentiary

Glenn E. Haeberlin

SUBJECT: Request for Training Credit

DATE: July 14, 1997

Prior to the July 1 execution of Harold McQueen at KSP, I had the opportunity to attend the execution of an inmate (Henry Hays) at Holden Prison, Atmore, Alabama. My purpose for attending the execution in Alabama was to observe firsthand this particular state's execution procedure. Specifics to be observed were: (1) security precautions, both internally and externally; (2) how their facility deals with the media and protestors; and (3) the preparation of the condemned and execution process.

I reported to the facility and met with Warden Charlie Jones and was assigned to his Deputy Warden, Jerry Ferrell, for the duration of the evening. I reported to the facility at approximately 5:00 p.m. on June 5 and exited the facility at approximately 12:45 a.m. on June 6, upon the completion of the execution.

It is my request to be credited with 8 hours training. If you have any questions regarding this matter, please do not hesitate to contact me.

sdp

CONTROLLED CHEMICAL DISPOSITION RECORD

KENTUCKY DEPARTMENT OF CORRECTIONS

[redacted]

I. CHEMICALS ISSUED BY PHARMACY

NAME OF CHEMICAL - AMOUNT	DATE ISSUED	LOT NO.	EXP. DATE	NUMBER OF VIALS
PENTOTHAL - 6 GRAMS	5/24/99	36-241-	July 199	12
PAVULON - 150 MG	5/24/99	02088 AK	10/99	15
POTASSIUM CHLORIDE - 720 MEQ	5/24/99	370437	10/99	18
VALIUM - 20 MG	5/24/99	118056	11/2001	2

ISSUED BY: (SIGN AND PRINT NAME)	RECEIVED BY: (SIGN AND PRINT NAME)	DEPT/LOCATION
Edwin L. Nickell	James E. Morse	15 WALK

II. CHEMICALS ADMINISTERED BY DESIGNATED EXECUTION TEAM MEMBER

DATE	TIME	INMATE NAME/NUMBER	CHEMICALS ADMINISTERED	AMOUNT
5/25/99	7:16PM - 7:23PM	EDWARD HARPER 32818	PENTOTHAL	2 GM
			PAVULON	50 MG
			POTASSIUM CHLORIDE	240 MEQ
			VALIUM	0

III. CHEMICALS DESTROYED

CHEMICAL DESTROYED	AMOUNT DESTROYED	NO. OF SYRINGES	DATE DESTROYED	DEPT/LOCATION
PENTOTHAL	2 GM	2	5/25/99	PHARMACY KSP
PAVULON	50 MG	1		
POTASSIUM CHLORIDE	240 MEQ	2		
VALIUM				

DESTROYED BY (SIGN AND PRINT NAME)	WITNESSED BY (SIGN AND PRINT NAME)	DEPT/LOCATION
James E. Morse	Wm E Henderson 5/25/99	PHARMACY DEPT. WARDEN SECURITY

IV. CHEMICALS RETURNED TO PHARMACY

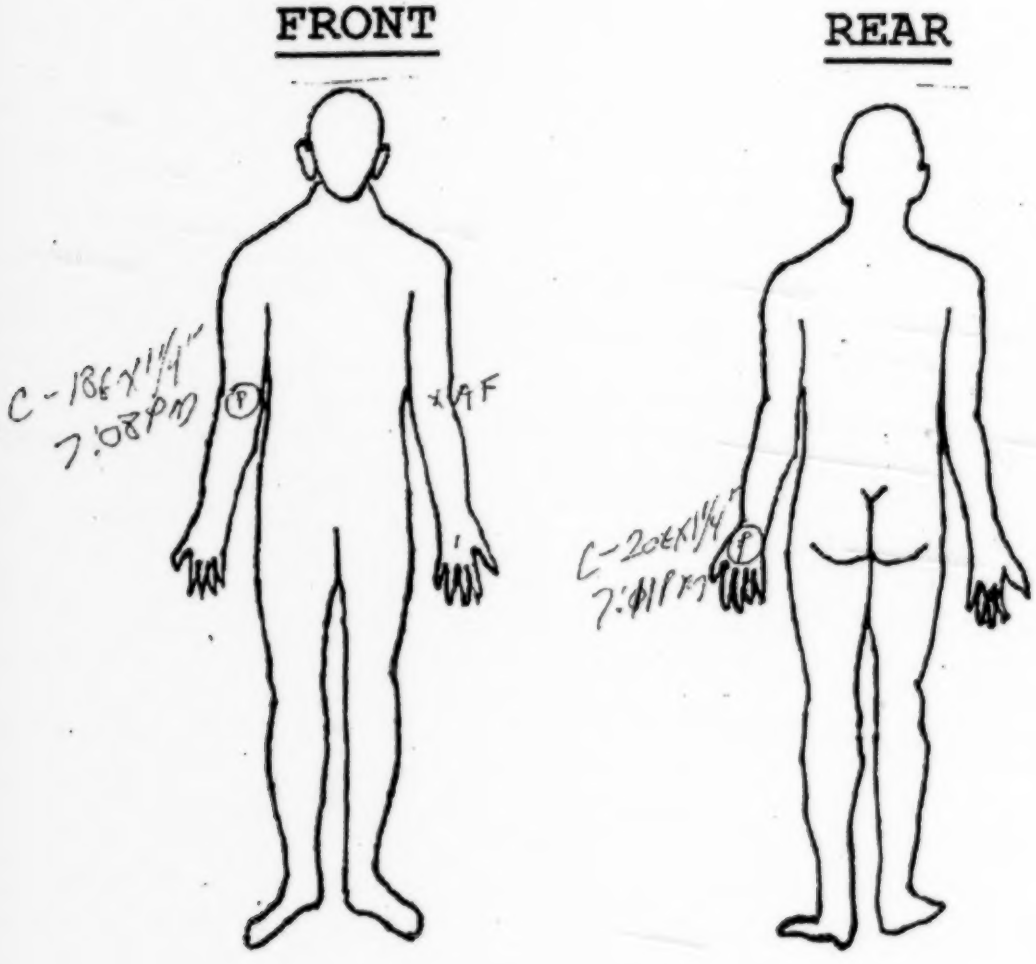
DATE RETURNE	CHEMICAL RETURNED	AMT RETURNED	NUMBER OF VIALS
5/25/99	PENTOTHAL	2 GM	4
	PAVULON	50 MG	5
	POTASSIUM CHLORIDE	240 MEQ	6
	VALIUM	20 MG	2

RETURNED BY: (SIGN AND PRINT NAME)	RECEIVED BY: (SIGN AND PRINT NAME)	DEPT/LOCATION
James E. Morse	Pharmacy	—

LETHAL INJECTION IV SITE PLACEMENT

DATE: 5-25-99

NAME: EDWARD HARPER
NUMBER: 32818



CODE:

AF:	ATTEMPTED, FAILED
P:	LINE SUCCESSFULLY PLACED
C:	CATHLON
CVL:	CENTRAL VENOUS LINE (CUTDOWN)
G:	SIZE OF LINE INSERTED
T:	TIME OF START

NAME EDWARD HARPER

NUMBER 32818

DATE 5-25-99

INTO CHAMBER 7:01PM

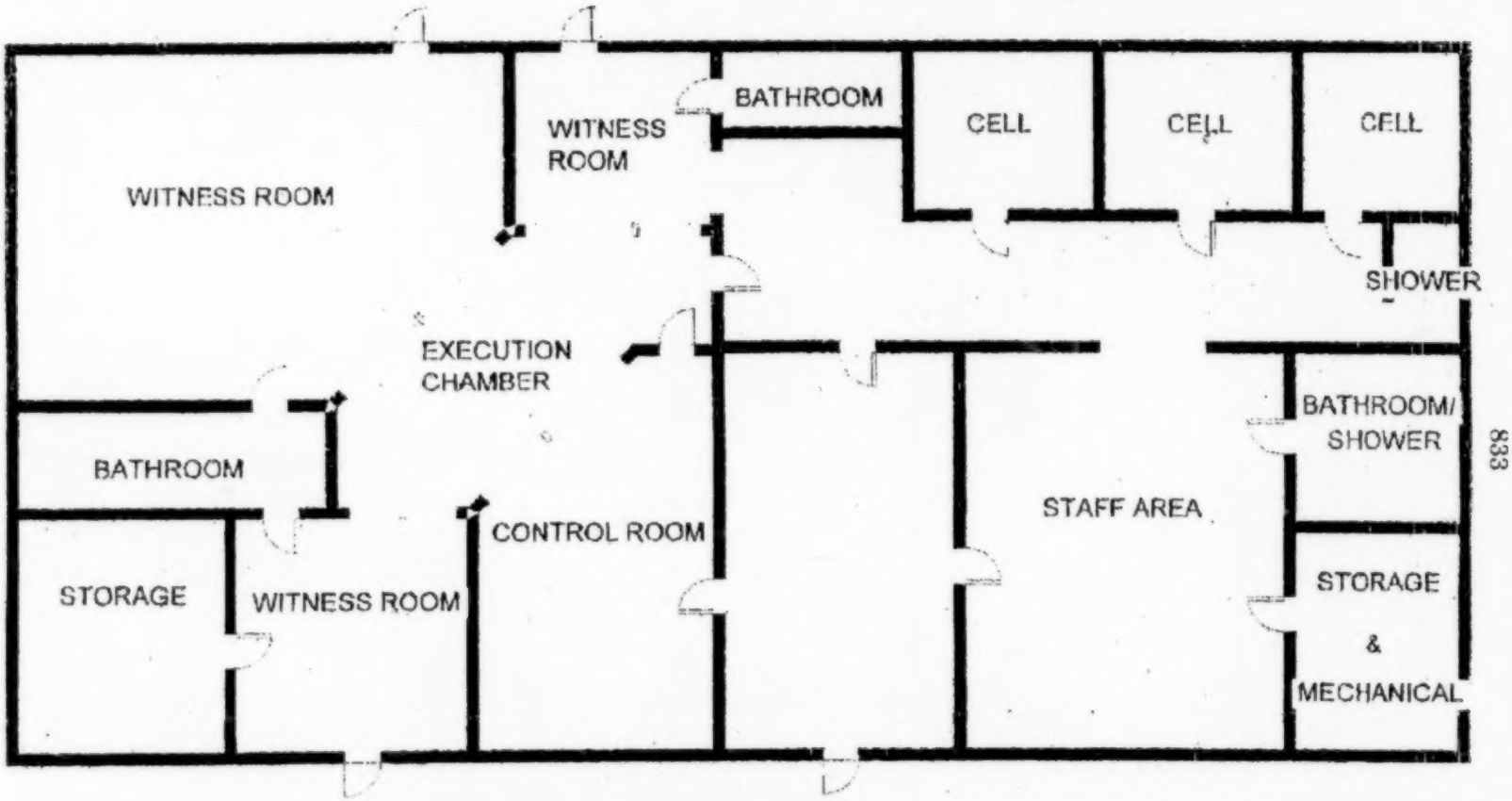
IV STARTED (LEFT) 7:11PM

IV STARTED (RIGHT) 7:08PM

INJECTION BEGUN 7:16PM

	1ST ROUND	2ND ROUND
SODIUM THIOPENTAL	7:16PM	7:18Am
PAVULON	7:19PM	—
POTASSIUM CHLORIDE	7:20PM	7:22PM

PRONOUNCED DEAD AT 7:28PM



EXECUTION BUILDING

EXHIBIT
96

COMMONWEALTH OF KENTUCKY
JUSTICE CABINET
OFFICE OF THE
CHIEF MEDICAL EXAMINER
URBAN GOVERNMENT CENTER
810 BARRET AVENUE
LOUISVILLE, KENTUCKY
40204-1702

SECTION OF FORENSIC PATHOLOGY
AND CLINICAL FORENSIC MEDICINE

TELEPHONE: (502) 852-5587
FACSIMILE: (502) 852-1767

FINAL DIAGNOSIS

HARPER, EDWARD LEE - ME99-346

I. Judicial execution by lethal injection
   - A) Postmortem heart blood toxicology
     1) Pancuronium 39 mg/L
     2) Thiopental 6.5 mg/L
     3) Chlorpheniramine 0.04 mg/L
   - B) Postmortem vena cava toxicology
     1) Pancuronium 30 mg/L
     2) Thiopental 3 mg/L
   - C) Postmortem right axillary vein toxicology
     1) Pancuronium 18 mg/L
     2) Thiopental 3 mg/L
   - D) Heart blood electrolytes:
     1) Sodium 147 meq/L
     2) Potassium 32.1 meq/L

II. No evidence of blunt trauma

III. No evidence of significant natural disease

OPINION: Death in this case is due to polypharmacy intoxication as a consequence of judicial execution by lethal injection. (CODE: E961P; E978)

Tracey Corey Handy, MD

DATE PERFORMED: May 26, 1999
DATE COMPLETED: July 9, 1999
COUNTY OF JURISDICTION: Lyon

POST MORTEM EXAMINATION

OF THE BODY OF

HARPER, EDWARD LEE -ME-99-346

A post mortem examination of the body identified as Edward Lee Harper is performed at the Urban County Government Center on May 26, 1999 at 9:40 a.m. by Dr. Tracey Corey Handy. Attendant is Jason Ritter.

EXTERIOR OF THE BODY

The body is received clad in a red scrub suit, and white briefs. A cloth scapular with Our Lady of Mount Carmel and Saint Simon as well as an unidentifiable saying with the following identifiable words, "Whosoever Has This, Shall Not Suffer Eternal Fire". This scapular is placed within the body bag.

The body is that of a normally developed, normally nourished, white male appearing around the given age of 50 years. The body has a measured height of 71" and a measured weight of 200 pounds. The scalp hair is brown, of normal texture, and generally less than 1" in length. The facial hair is shaven. The pupils are equal, round and 6mm in diameter. The sclerae and conjunctivae are somewhat injected. The irides are blue. Yellow/brown mucoid material exudes from the nose and mouth. The natural anterior dentition is in fair repair. The anterior intra-oral mucosa is atraumatic. The jaw displays rigor mortis. The trachea is in the midline. The supra-clavicular lymph nodes are not palpable. The symmetrical thorax demonstrates no abnormal movability. The abdomen displays a remote, faint, well healed, and obliquely oriented surgical scar progressing infero-laterally in the right upper quadrant. The pubic hair is brown, curly and of normal male distribution with scattered gray hair. The penis is apparently uncircumcised. Both testes are palpable within the scrotal sac. Examination and palpation of the extremities reveals no evidence of peripheral edema, deformity or fracture. Rigor mortis is well developed in the major muscle groups. Lividity blanches posteriorly and over the right aspect of the head and face except over pressure points.

EVIDENCE OF JUDICIAL EXECUTION

EKG pads are present over the anterior thorax. A vascular access line enters the right antecubital fossa. A vascular access line enters the dorsal surface of the left hand. A needle puncture site is identified in the left antecubital fossa.

INTERIOR OF THE BODY

A "Y" incision is carried through a midline panniculus measuring up to 3cm into an abdominal cavity lined with glistening serosa and containing no free fluid. Generally, the infra-abdominal viscera maintain their usual in situ relations. Multiple adhesions are visualized within the right aspect of the abdomen involving both upper and lower

ME99-436

quadrants. These adhesions prohibit visualization of the liver edge. The vermiform appendix is not identified. Multiple surgical staples are present in the region normally occupied by the vermiform appendix.

The mediastinum is in the midline. The lungs are normally inflated bilaterally. There is no free fluid in either smooth, pleural space. The pericardial sac is opened and noted to contain less than 5ml of clear straw colored fluid.

CARDIOVASCULAR

The heart is of the normal configuration and weighs 420 grams. The epicardial surface contains a normal amount of glistening, yellow adipose tissue. The cardiac chambers are of proportionate capacity. The mural and valvular endocardia are smooth and glistening. The valves display no abnormalities. The papillary muscles and projecting myocardial muscle bundles are of normal prominence. The coronary ostia are in their usual location and give rise to normally distributed coronary arteries. Serial sectioning of the coronary arteries discloses multifocal grade II calcific atherosclerosis of the proximal left anterior descending coronary artery. On section, the firm, brown myocardium is of normal consistency. No focus of scar or acute hemorrhage is demonstrated.

The systemic aorta is of normal caliber and elasticity. The intimal surface is smooth and glistening. The ostia of the large branches are of normal distribution and dimension. Exploration and inspection of the large veins reveals no evidence of ante mortem clot.

RESPIRATORY

The lungs are of the usual lobation and weigh 690 and 600 grams, right and left respectively. Mild amounts of subpleural anthracotic pigment are present within all lobes. The pleurae are generally smooth and glistening. Dissection of the bronchial tree discloses a normal tan epithelium. The bronchial tree contains a moderate amount of aspirated gastric contents. The pulmonary vasculature is of normal distribution and dimension. The lining intima is glistening and smooth. It contains no ante mortem thrombi. Serial sectioning of the pulmonary parenchyma discloses the usual fine, lacy pulmonary architecture. No focus of consolidation, calcification or friability formation is demonstrated. The hilar lymph nodes are moderately anthracotic and non-calcified.

LIVER AND GALLBLADDER

The liver weighs 2290 grams. The hepatic capsule displays multifocal areas of adhesion. It is intact. Serial sectioning of the hepatic substance discloses homogeneous brown substance throughout without focal abnormal markings. The anterior surface of the

ME99-436

right lobe of the liver displays a focal irregular area of capsular thickening and white/yellow discoloration.

The gallbladder is not identified.

PANCREAS

The pancreas is in its usual location and on section is composed of normally lobulated, yellow/tan, soft substance. No focus of calcification is demonstrated.

ADRENALS

The adrenal glands are in their usual location and are of normal size and shape. On section, they are composed of smooth, yellow outer cortical rims, which overlie zones of deeper brown cortical and gray medullary substances.

GENITOURINARY

The kidneys are of similar size and shape. Together they weigh 460 grams. The capsules may be removed easily to reveal smooth, medium brown renal surfaces. On section, the cortices and medullae are well demarcated. The usual arcuate markings are preserved. No abnormality of the calyx, pelvis, cortex or medulla is demonstrated. The ureters are patent.

The bladder lumen contains approximately 30ml of clear, straw colored urine. The openings of the ureters into the bladder are normal. The bladder mucosa is light tan and finely wrinkled.

The prostate gland is of normal size and shape. On section, it is composed of firm, white, almost rubbery substance. No focus of nodularity or yellow discoloration is demonstrated.

SPLEEN

The spleen weighs 180 grams. The capsule is smooth, shiny and intact. On section, no focal abnormal markings are demonstrated. The usual follicular and trabecular markings are preserved.

ALIMENTARY

The smooth-walled esophagus is intact, of usual thickness and gray. Its mucosa is present in normal longitudinal folds. The cardioesophageal junction is easily identified.

ME99-346

The gastric wall is intact and of usual thickness. No abnormality of its serosal surface is demonstrated. The gastric mucosa is present in its normal rugal pattern. The stomach contains approximately 400ml of thick, semi-liquid, partially digested food substance including apparent fragments of bread, tomato and lettuce. The pylorus and duodenum display no abnormality. The small and large intestines are not remarkable.

MUSCULOSKELETAL

Examination and palpation of the spine, ribs, shoulder girdle and pelvis fails to reveal fracture.

NECK

There is no soft tissue hemorrhage within the neck. The hyoid bone and thyroid cartilages are intact. The larynx and trachea are of average caliber and are patent. They are lined with smooth, pale tan epithelium. The vocal cords display no abnormality.

The tongue displays no abnormality.

THYROID

The thyroid gland demonstrates no abnormality.

HEAD

There is no soft tissue hemorrhage within the scalp. The calvarium is intact and displays no abnormality. The dura is of normal tenseness. The superior sagittal sinus is patent and in the midline. The leptomeninges are glistening and translucent. The brain is of normal convolutional pattern and weighs 1500 grams.

Examination of the arteries at the base of the brain reveals them to be of normal distribution and dimension. They are smooth-walled, collapsed and transparent. The uncinate gyri and cerebellar tonsils do not demonstrate pressure phenomena.

Multiple frontal sections of the brain at approximate levels of 2cm reveal normal relations of gray and white substance. No focal abnormal markings are demonstrated. The ventricles contain clear fluid and the lining ependyma is smooth and glistening. The choroid plexuses display no abnormality. The basal ganglia are normal.

Multiple horizontal sections of the cerebellum, pons and medulla reveal normal architecture of these structures without focal abnormal markings.

Examination of the base of the skull, after removal of the brain and dura, fails to reveal fracture.

MICROSCOPIC

HARPER, EDWARD LEE - ME99-346

HEART	NCH
LUNGS	Scattered edema
KIDNEY	Abundant pink fluid in Bowman's Space
BRAIN	NCH

CABINET FOR HUMAN RESOURCES
Department for Public Health, Division of Laboratory Services
100 Cower Blvd, Suite 204 Frankfort, Kentucky 40621
Samuel B. Gregorio, Dr.P.H., Acting Director (502)564-4446

****

Medrec#: 1999TM1040

Name: HARPER, EDWARD L.
ID#: Sex: Race:
Occupation:

Submitter: KYLE DUNN
LYON COUNTY CORONER
PO BOX 511
EDDYVILLE
KY 42038

Sub. County: LYON
Miscellaneous Information:
MC99-346
ESTIMATED COMPLETION TIME: 30
U.S. MAIL - SEALED
SEALED SECURITAINER

Copy 1:
Copy 2: TRACEY COREY HANDY - MD

Remarks:
Collected:
Lab ID#: 1999TM1040 -79694
Purpose:
Specimen: BLOOD-RIGHT AXILLA

Received: 20-MAY-1999 1245 Clerk: MKW

BLOOD-RIGHT AXI

LABORATORY REPORT

Flags	Test (Method)	Results (**New Result)	Therapeutic Ranges	Units
		*** TOXICOLOGY ***		
	ACETAMINOPHEN(FPIA)	NEGATIVE*	0-20	MG/l
	SALICYLATES (FPIA)	NEGATIVE*	20-250	MG/L
	ADDITIONAL RESULTS:	THIOPENTAL 3 MG/l BY FPIA*		
	MISCELLANEOUS TOX:	PANCURONIUM (VISIBLE SPECTROSCOPY) 18MG/L*		

Michael K. Ward

CABINET FOR HUMAN RESOURCES
Department for Public Health; Division of Laboratory Services
100 Sower Blvd; Suite 204 Frankfort; Kentucky 40621
Samuel B. Gregorio, Dr.P.H., Acting Director (502)564-4446

****

ase: HARPER, EDWARD L. Medrec#: 1999TH1040
ge: Sex: Race:
ccupation:

ubmitter: KYLE DUNN
LYON COUNTY CORONER
PO BOX 511
EDDYVILLE
KY 42038

Sub. County: LYON
Miscellaneous Information:
MC99-346
ESTIMATED COMPLETION TIME: 30
U.S. MAIL - SFAIFD
SEALED SECURITAINER

Copy 1:
Copy 2: TRACEY COREY HANDY MD

Remarks:
Collected:
Received: 28-MAY-1999 1244 Clerk: MKW
Lab ID#: 1999TH1040 -77687
Purpose:
Specimen: BLOOD--VENA CAVA BLOOD-VENA CAVA

L A B O R A T O R Y R E P O R T

Flag	Test (Method)	Results (*=New Result)	Therapeutic Ranges	Units
		*** TOXICOLOGY ***		
	ACETAMINOPHEN(FPIA)	NEGATIVE*	0-20	MG/L
	SALICYLATES (FPIA)	NEGATIVE*	20-250	MG/L
	ADDITIONAL RESULTS:	THIOPENTAL 3 MG/L BY FPIA*		
	MISCELLANEOUS TOX:	PANCURONIUM (VISIBLE SPECTROSCOPY) 30MG/L*		

Michael L. Ward
MICHAEL L. WARD, FORENSIC SCI. SPEC

CABINET FOR HUMAN RESOURCES
Department for Public Health, Division of Laboratory Services
100 Cower Blvd, Suite 204 Frankfort, Kentucky 40621
Samuel B. Gregorio, Dr.P.H., Acting Director (502)564-4446

****

ame: HARPER, EDWARD L. Medrec#: 1999TM1040
ge: Sex: Race:
ccupation:

ubmitter: KYLE DUNN
LYON COUNTY CORONER
PO BOX 511
EDDYVILLE
KY 42038

Sub. County: LYON
Miscellaneous Information:
ME99-346
ESTIMATED COMPLETION TIME: 30
U.S. MAIL - SEALED
SEALED SECURITAINER

opy 1:
opy 2: TRACEY COREY HANDY MD

emarks:
ollected: Received: 27-MAY-1999 1323 Clerk: MKW
ab ID#: 1999TM1040 -77502
urpose:
pecimen: BLOOD-HEART BLOOD-HEART

LABORATORY REPORT

Test	Test (Method)	Results (*=New Result)	Therapeutic Ranges	Units
		*** TOXICOLOGY ***		
	BA (GC)	NEGATIVE*	0.020-0.100	MG/100
	VOLATILES SCR. (GC)	NEGATIVE*		
	CONFIRMED (GC)	CHLORPHENIRAMINE 0.04*		MG/L
	ACETAMINOPHEN(FPIA)	NEGATIVE*	0-20	MG/L
	SALICYLATES (FPIA)	NEGATIVE*	20-250	MG/L
	ADDITIONAL RESULTS:	THIOPENTAL 6.5 MG/L BY FPIA*		
	MISCELLANEOUS TOX:	PANCURONIUM (VISIBLE SPECTROSCOPY) 39MG/L*		

Michael K. Ward

CABINET FOR HUMAN RESOURCES
Department for Public Health, Division of Laboratory Services
100 Sower Blvd, Suite 204 Frankfort, Kentucky 40621
Samuel B. Gregorio, Dr.P.H., Acting Director (502)564-4446

****

me: HARPER, EDWARD L. Medrec#: 1999TM1040
e: Sex: Race:
cupation:

ubmitter: KYLE DUNN
LYON COUNTY CORONER
PO BOX 511
EDDYVILLE
KY 42038

Sub. County: LYON
Miscellaneous Information:
MF99-346
ESTIMATED COMPLETION TIME: 30
U.S. MAIL - SEALED
SEALED SECURITAINER

opy 1:
opy 2: TRACEY CORFY HANDY MD

emarks:
ollected:
ab ID#: 1999TM1040 -77501
urpose:
pecimen: URINE

Received: 27-MAY-1999 1322 Clerk: MKW

URINE

LABORATORY REPORT

Flag	Test (Method)	Results (*=New Result)	Therapeutic Ranges	Units
		*** TOXICOLOGY ***		
	OPIATES (FPIA)	NEGATIVE*		
	COCAINE MET. (FPIA)	NEGATIVE*		
	PCP (FPIA)	NEGATIVE*		
	CANNABINOIDS (FPIA)	NEGATIVE*		
	BENZODIAZEPIN(FPIA)	NEGATIVE*		
	AMPHETAMINES (FPIA)	NEGATIVE*		
	ADDITIONAL RESULTS:	NO PANCURONIUM DETECTED BY VISIBLE SPECTROSCOPY		
	MISCELLANEOUS TOX:	CHLORPHENIRAMINE & THIOPENTAL DETECTED*		

Michael K. Ward
MICHAEL K. WARD, FORENSIC SCI. SPEC
Last Filed: 27-JUL-1999 21:47

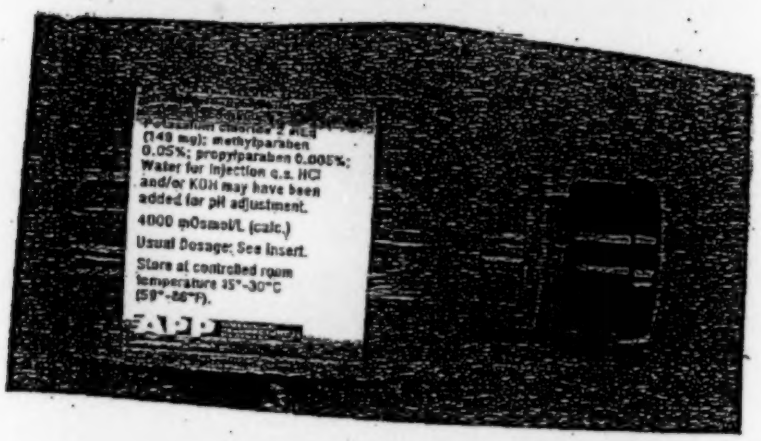
D/A: 27-MAY-1999 Page: 1

EXHIBIT

EXHIBIT

262306
EXP 10/06

POTASSIUM CHLORIDE
2 mEq/mL (60 mEq)
30 mL
MUST BE DILUTED PRIOR TO IV ADMINISTRATION


(149 mg); methylparaben 0.05%; propylparaben 0.005%; Water for Injection q.s. HCl and/or KOH may have been added for pH adjustment.
4000 mOsmol/L (calc.)
Usual Dosage: See insert.
Store at controlled room temperature 15°-30°C (59°-86°F).
APP

401702C
LOT 342720
EXP 05/06
3 63323-967-30 7

2 60cc

847

One/NDC 0074-3329-01

®

C III

(25 mg/mL)

℞ only

THIOPENTAL SODIUM
FOR INJECTION, USP

WARNING: MAY BE HABIT FORMING.

Contains no bacteriostat. Use reconstituted Pentothal within 24 hours.

ABBOTT LABORATORIES, NORTH CHICAGO, IL 60064, USA

EXP. 1AUG2005
LOT 08-159-DK

USE ASEPTIC TECHNIQUE

Dissolve 500 mg Pentothal (Thiopental Sodium for Injection, USP) in 20 mL of Sterile Water for Injection, USP to make a 2.5% solution (25 mg/mL). Contents should be completely reconstituted and used within 24 hours.

Use reconstituted solution only if it is clear, free from precipitate and is not discolored.

(01) 0 030074 332901 8

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37-0064-R15-5/03 Printed in USA

PLAINTIFF'S EXHIBIT

25

Technical Report

The effect of pancuronium on the solubility of aqueous thiopentone

William D. Morton MD FRCPC,
Jerrold Lerman MD FRCPC

In this study we identified the precipitate formed when pancuronium bromide (pH 3.9) and sodium thiopentone (pH 10.6) are combined in vitro. A precipitate formed when sufficient pancuronium was added to thiopentone to decrease the pH below 9.25. The precipitate was isolated, redissolved in alkaline solution and identified as thiopentone using ultraviolet spectrophotometry. Pancuronium was soluble in water in the pH range of 2.0 to 12.0, whereas thiopentone was soluble in water only at a pH greater than 9.90. We conclude that thiopentone precipitates when combined with pancuronium because of a pH-dependent decrease in the solubility of thiopentone, rather than a chemical interaction.

When solutions of sodium thiopentone and pancuronium bromide are combined, a flocculent white precipitate forms.[1] This precipitate can occlude an intravenous catheter during the induction of anaesthesia. If pancuronium is administered before thiopentone, the resultant precipitate may occlude the intravenous catheter before an adequate dose of thiopentone is administered. This may result in patient awareness and recall. Induction techniques requiring the rapid administration of pancuronium and thiopentone (as in patients with full stomachs and open eye injuries) must therefore include a thorough flush of the intravenous tubing after administration of each drug.[2] If the precipitate is administered, its effects on drug potency, pulmonary vascular tone or the incidence of peripheral thrombophlebitis are unclear.

Since a number of reaction products could result from combining solutions of thiopentone and pancuronium, we determined the composition of the precipitate and supernatant when these two drugs are combined.

Key words
ANAESTHETICS, INTRAVENOUS: thiopentone;
NEUROMUSCULAR RELAXANTS: pancuronium;
DRUG INTERACTIONS: pancuronium, thiopentone.

From the Department of Anaesthesia and the Research Institute, The Hospital for Sick Children and University of Toronto, Toronto, Ontario.

Address correspondence to: Dr. William D. Morton, Department of Anaesthesia, The Hospital for Sick Children, 555 University Avenue, Toronto, Ontario M5G 1X8.

CAN J ANAESTH 1987 / 34 : 1 / pp 87–9

Methods

A commercial preparation (Abbott Laboratories) of 1 g of sodium thiopentone with 60 mg sodium carbonate was diluted with 40 ml of double-distilled water immediately before each study. Commercially supplied ampoules of pancuronium bromide in a 0.1 per cent solution (Organon) were warmed to room temperature for all experiments.

To determine the effect of pH on the solubility of thiopentone, 10 ml of thiopentone (2.5 per cent) was stirred continuously at room temperature while the pH was monitored using a Radiometer pH meter. The pH meter was calibrated with three standard solutions of pH 4.01, 7.00, and 9.18. Hydrochloric acid (HCl) (0.2 N) was titrated slowly into the thiopentone solution. When a persistent white suspension was observed, the pH was recorded. The study was then repeated with pancuronium 0.1 per cent substituted for the 0.2 N HCl. All titrations were repeated in triplicate.

Ultraviolet (UV) light is strongly absorbed by covalent chemical bonds. A given arrangement of bonds (for example, a benzene ring) will absorb a specific range of UV frequencies within the UV spectrum. As a result, a complex molecule such as pancuronium or thiopentone will have a pattern of UV absorption which reflects its unique chemical structure. The UV absorption spectrum of thiopentone was determined by acidifying 2.5 per cent thiopentone with 0.1 N HCl. The resultant precipitate was washed, redissolved in NaOH solution, and analyzed. The UV absorption spectrum of pancuronium was determined after dilution to a 0.01 per cent solution.

In the final study, we analyzed the precipitate. A high-speed centrifuge tube was filled with 50 µl of 2.5 per cent thiopentone and 4.5 cc of 0.1 per cent pancuronium.

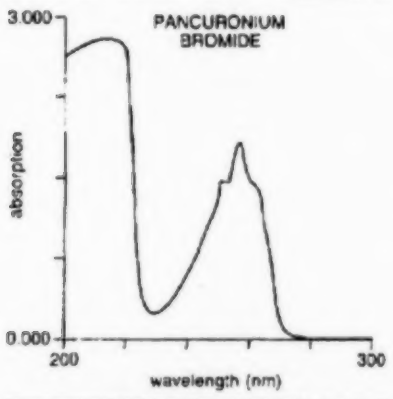


FIGURE 1 The UV absorption spectrum of pancuronium bromide at a 0.01 per cent solution. The absorption peak is at 256.5 nm.

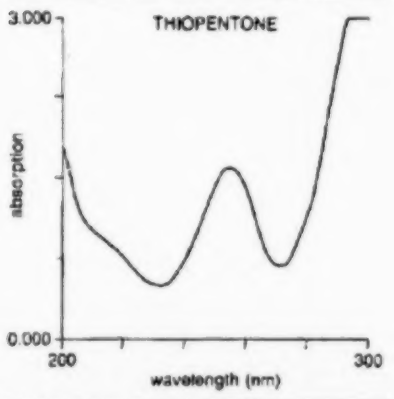


FIGURE 2 The UV absorption spectrum of sodium thiopentone in a 0.005 per cent solution. A solution of 2.5 per cent thiopentone was first acidified, and the resultant precipitate redissolved in a dilute alkaline solution. The absorption peak is at 254.5 nm.

Following centrifugation, the precipitate was washed with distilled water, redissolved in NaOH solution and analyzed by UV spectrophotometry. A Beckman DU-7 UV spectrophotometer was calibrated with double-distilled water before analysis of the samples.

Results

Thiopentone formed a cloudy precipitate at a pH of 9.90 ± 0.05 when titrated with 0.2 N HCl. Thiopentone titrated with pancuronium formed a precipitate at a pH of 9.25 ± 0.03.

The UV absorption spectrum of pancuronium is characterized by a well-defined peak at 256.5 nm which is bracketed by two shoulders (Figure 1). The absorption peak for thiopentone is at 254.4 nm, with two gradually tapering valleys toward each side of the peak (Figure 2). Thiopentone also absorbs UV light at 300 nm, whereas pancuronium does not.

When the precipitate from the mixture of thiopentone and pancuronium was redissolved in dilute alkaline solution, the UV absorption spectrum was characteristic of thiopentone (Figure 3). The UV absorption of the supernatant was characteristic of pancuronium (Figure 4). In replicate experiments, the additional small shoulder seen from wavelengths 280 to 290 nm was present in all samples of supernatant but not in the pancuronium control tubes.

Discussion

When solutions of thiopentone and pancuronium are combined, a white suspension of thiopentone forms if the pH of the resultant mixture is less than 9.25. Sodium thiopentone is soluble in water only at an alkaline pH (pH > 9.90). These observations indicate that thiopentone precipitates when it is combined with sufficient

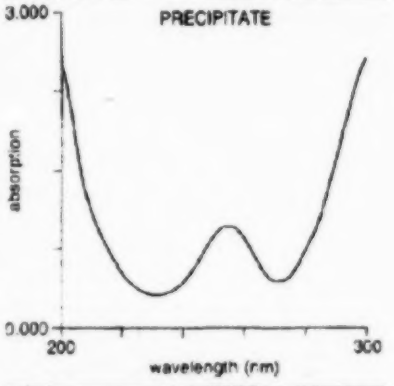


FIGURE 3 The UV absorption spectrum of the precipitate from a mixture of pancuronium bromide and sodium thiopentone. The precipitate was redissolved in a dilute alkaline solution. The absorption peak is at 255.0 nm.

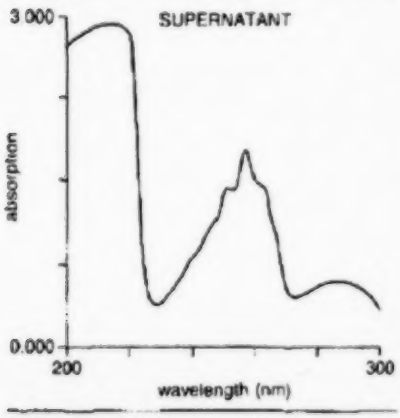


FIGURE 4 The UV absorption spectrum of the supernatant from a mixture of pancuronium bromide and sodium thiopentone. The supernatant was diluted ten-fold for spectrophotometry. The absorption peak is at 256.5 nm.

pancuronium to reduce the pH to less than 9.25. The small shoulder observed between wavelengths 280 and 290 nm (Figure 3) may be due to trace amounts of an acid-soluble pancuronium-thiopentone complex ion. Acid-soluble species could also explain our finding that thiopentone was soluble at a pH ≥ 9.25 when titrated with pancuronium 0.1 per cent but was soluble only at a pH ≥ 9.90 when titrated with 0.2 N HCl.

In summary, insoluble thiopentone is the precipitate formed when aqueous thiopentone is mixed with pancuronium. The principle clinical risk of inadvertently mixing thiopentone and pancuronium is the resultant loss of intravenous access. This is particularly likely with the small diameter catheters used in paediatric practice. To avoid this problem, we recommend a thorough flush of the intravenous tubing including the injection port after administration of each drug.

Acknowledgements

The authors thank Ms. B. White (Department of Biochemistry) for her assistance in completing this study and Ms. S. L. Loo for her assistance in preparing this manuscript.

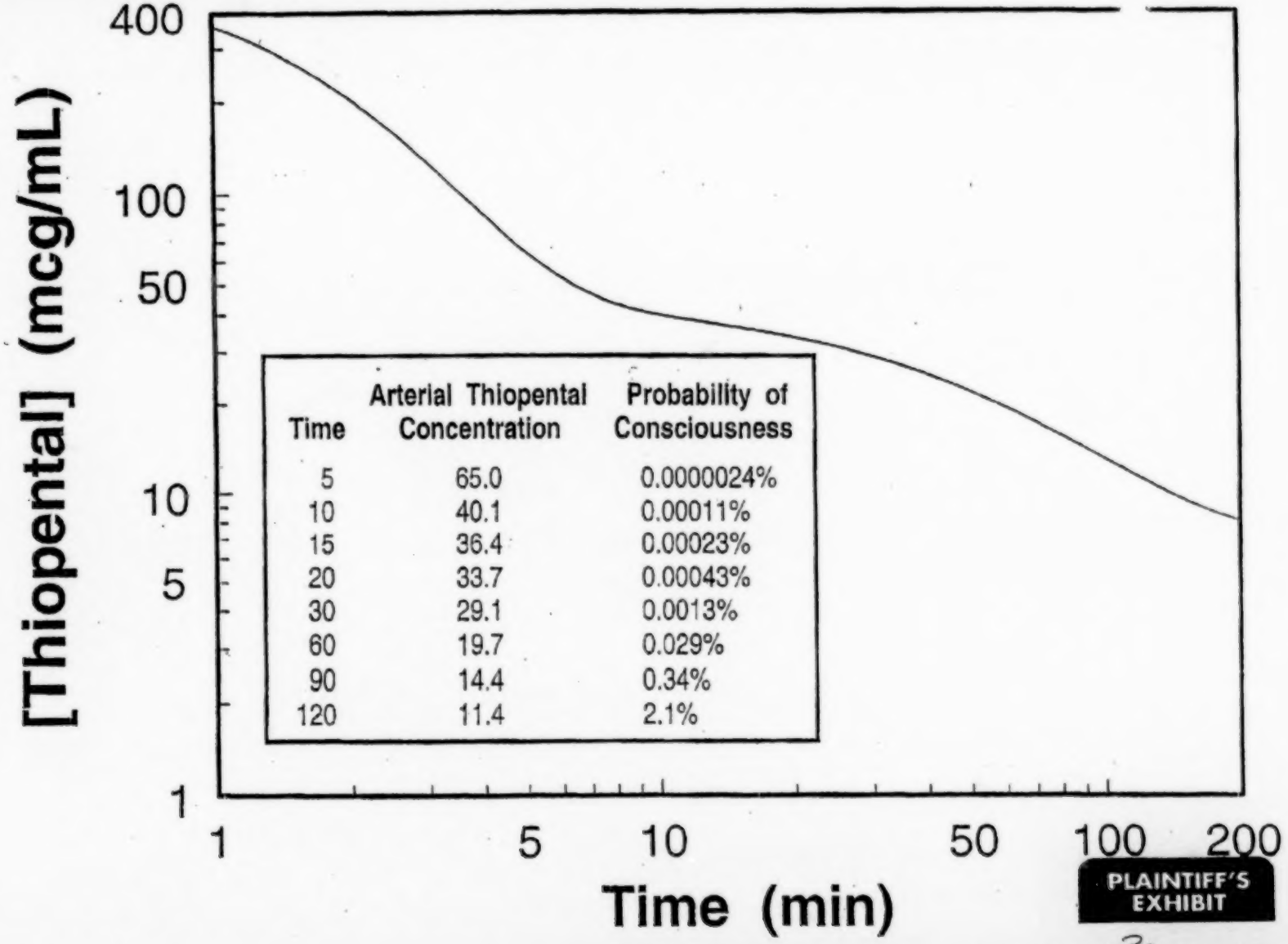
References

1 *Barr AM, Thornley BA*. Thiopentone and pancuronium crash induction. A comparison with thiopentone and suxamethonium. Anaesthesia 1978; 33: 25–31.

2 *Lerman J, Kiskiss AA*. Lidocaine attenuates the intraocular pressure response to rapid incubation in children. Can Anaesth Soc J 1985; 32: 339–45.

Résumé

Dans cette étude on a identifié le précipité qui se forme à la suite de la combinaison in vitro du bromure de pancuronium (pH 3.9) et du thiopentone de sodium (pH 10.6). Si la quantité de pancuronium est suffisante, un précipité se forme lorsque le pH est en bas de 9.25. Le précipité était isolé, redissout dans une solution alcaline et identifié par spectrophotométrie aux rayons ultraviolets comme étant le thiopentone. On a trouvé que le pancuronium était soluble dans l'eau lorsque le pH est aux alentours de 2.0 à 12.0, le thiopentone lui était soluble dans l'eau uniquement à un pH supérieur à 9.90. On conclut que le thiopentone précipite si combiné au pancuronium à cause de la diminution de solubilité du thiopentone qui est relié au pH plutôt qu'à une intéraction chimique.



Time	Arterial Thiopental Concentration	Probability of Consciousness
5	65.0	0.0000024%
10	40.1	0.00011%
15	36.4	0.00023%
20	33.7	0.00043%
30	29.1	0.0013%
60	19.7	0.029%
90	14.4	0.34%
120	11.4	2.1%

PLAINTIFF'S EXHIBIT

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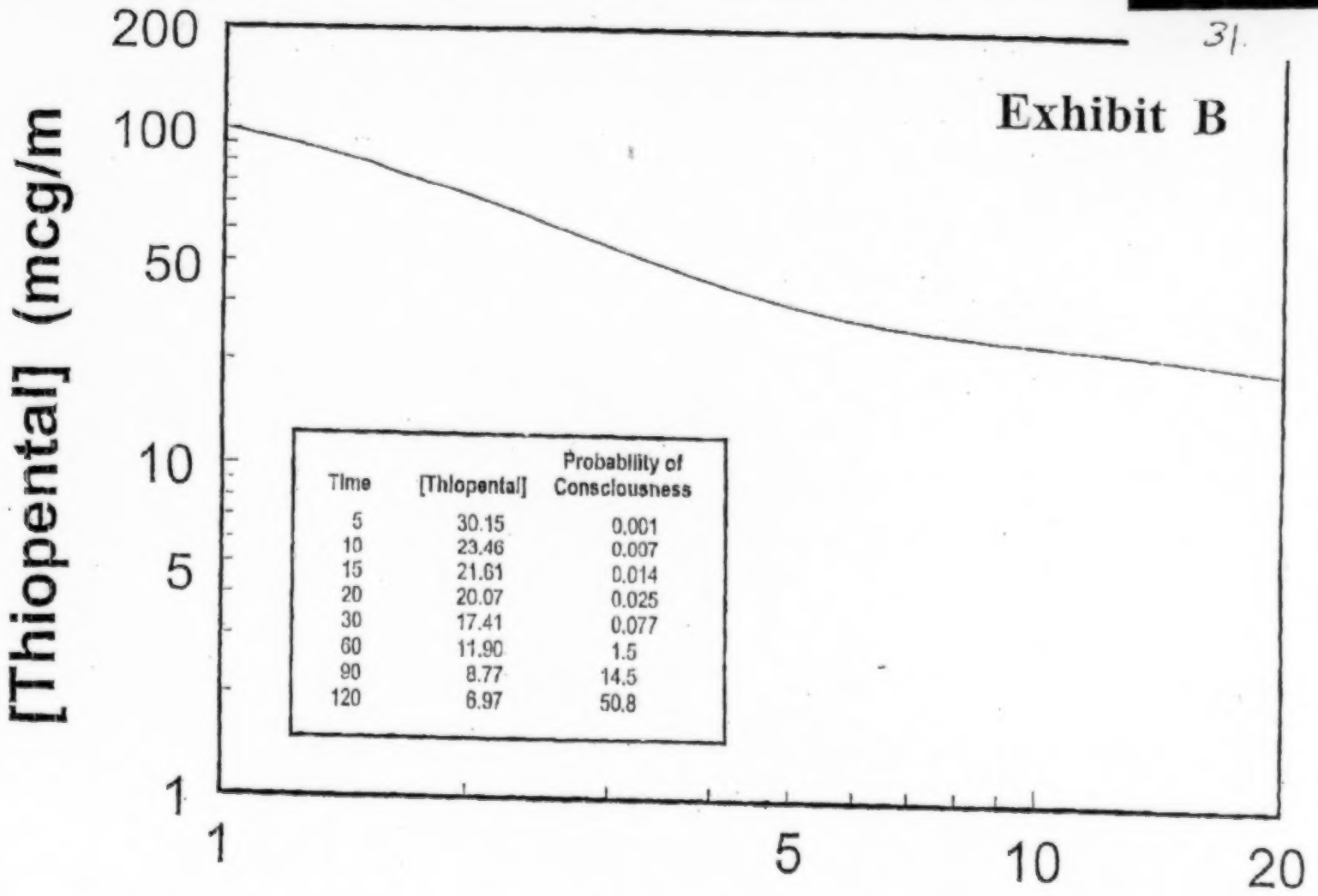

Time	[Thiopental]	Probability of Consciousness
5	30.15	0.001
10	23.46	0.007
15	21.61	0.014
20	20.07	0.025
30	17.41	0.077
60	11.90	1.5
90	8.77	14.5
120	6.97	50.8

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Drug and chemical blood-level data 2001

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Abstract

Current blood-level data are presented for drugs and chemicals of toxicologic interest. The data represent an update of previously published compilations of therapeutic, toxic and lethal blood-levels. © 2001 Elsevier Science Ireland Ltd. All rights reserved.

Keywords: Drug blood-levels; Therapeutic drug levels; Toxic blood-levels; Lethal blood-levels

1. Introduction

Since first publishing a tabulation of therapeutic, toxic or lethal drug and chemical blood-level concentrations in the early 1970s [1], the data has been published in revised form numerous times in journals and in reference books [2–12]. The first published form was done by Fisher Scientific and consisted of one page of levels. There have been other authors that have published tables dealing with drug levels, but these have disappeared and have not been updated [13–15]. With the addition of new drug entities on an annual basis, it is now necessary to update and revise the blood-level data more frequently.

The same cautions that have been indicated in earlier publications still apply to the interpretation of the information of blood-levels contained in Table 1. Post-mortem redistribution is a more recent factor that must be taken into consideration. The first published paper dealing with post-mortem redistribution was published in 1971 [16]. At the time, the authors referred to post-mortem redistribution as post-mortem diffusion.

It should also be noted that this table does not apply to infants and children. The levels for infants and children can be calculated from the data using any one of the rules for calculation of dosage such as Young's, Cowling's, Fried's or Clark's. The method based on surface area as related to weight can also be used [17]. The surface area calculation is the one generally used.

The values in the table are not considered absolute, but are to be used as a guideline in evaluating a given case. The values can be affected by dose, route of administration, absorption differences, age, sex, tolerance, pathology or disease state, method of analysis, post-mortem redistribution, protein binding, active metabolites, total or free drug, etc. Users of the table are referred to Winek's Toxicology Annual [7] or Chapter 72 in Forensic Medicine [8]. For other tissue levels and pharmacokinetic data users are referred to Baselt's reference [18]. An important caution is that ante-mortem pharmacokinetics does not apply to the post-mortem state. There have been attempts to apply pharmacokinetics using a one compartment or two compartment system to consider the dose taken. Such pharmacokinetic methods do not apply to the morbid state.

2. Definition of blood-levels

2.1. Therapeutic blood-level

Winek defines a therapeutic blood-level as that concentration of drug and/or its active metabolite(s) present in the blood (serum or plasma) following therapeutically effective dosage in humans.

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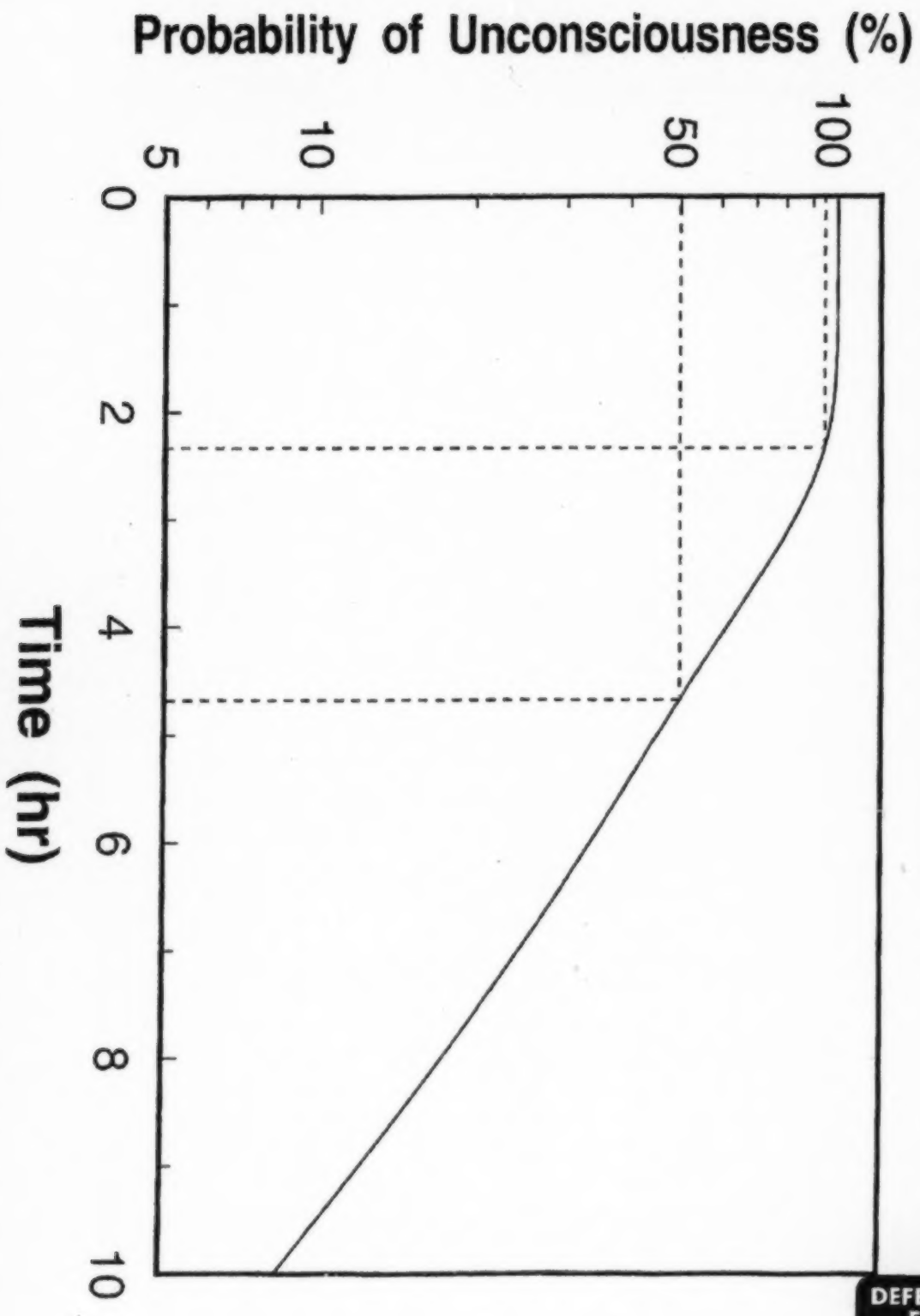
Table 1 (*Continued*)

Drug	Therapeutic or normal		Toxic		Lethal	
	(mg%)	(μg/ml)	(mg%)	(μg/ml)	(mg%)	(μg/ml)
Soma (carisoprodol)	1–4	10–40	3–5	30–50	11	110
Sparine (promazine)	–	–	>0.1	>1	>0.5	>5
Stadol (butorphanol)	0.00011–0.00017	0.0011–0.0017	–	–	–	–
Stelazine (trifluoperazine)	0.05–0.20	0.5–2.0	0.12–0.30	1.2–3.0	0.3–0.8	3–8
Strychnine	–	–	0.2	2	0.28–1.20	2.8–12.0
Sublimaze (fentanyl)	0.001–0.010	0.01–0.10	–	–	–	–
Sudafed (pseudoephedrine)	0.050–0.077	0.50–0.77	–	–	1.9	19
Sufenta (sufentanil)	0.0001–0.0011	0.001–0.011	–	–	–	–
Sufentanil (sufenta)	0.0001–0.0011	0.001–0.011	–	–	–	–
Sulfadiazine	8–15	80–150	–	–	–	–
Sulfaguanidine	3–5	30–50	–	–	–	–
Sulfanilamide	10–15	100–150	–	–	–	–
Sulfisoxazole	9–10	90–100	–	–	–	–
Sulindac (clinoril)	0.4–0.5	4–5	–	–	–	–
Sumatriptan (imitrex)	0.0024–0.0095	0.024–0.095	–	–	–	–
Surmontil (trimipramine)	0.001–0.030	0.01–0.30	–	–	0.87–1.20	8.7–12.0
Symmetrel (amantadine)	0.006–0.031	0.06–0.31	0.1–0.05	1–0.5	0.21–0.48	2.1–4.8
T						
Tacrolimus (prograf)	0.0005–0.002	0.005–0.02	>0.003	>0.03	–	–
Tagamet (cimetidine)	0.05–0.45	0.5–4.5	–	–	–	–
Talwin (pentazocine)	0.003–0.100	0.03–1.00	0.2–0.5	2–5	>0.03	>0.3
Tambocar (flecainide)	0.02–0.10	0.2–1.0	–	–	–	–
Tandearil (oxyphenbutazone)	1.1–11.8	11–118	–	–	–	–
Taractan (chlorprothixene)	0.004–0.030	0.04–0.30	0.04–0.08	0.4–0.8	–	–
Tegretol (carbamazepine)	0.14–1.2	1.4–12	>1.5	>15	>5	>50
Temazepam (restoril)	0.04–0.09	0.4–0.9	–	–	–	–
Tenormin (atenolol)	0.02–0.07	0.20–0.70	3.5	35	–	–
Tenuate (diethylpropion)	0.0007–0.0200	0.007–0.200	–	–	0.54	5.4
Terbutaline (brethine)	0.0002–0.0006	0.002–0.006	–	–	0.004	0.04
Terfenadine (seldane) (as active metabolite)	0.0133–0.0423	0.133–0.423	–	–	–	–
Tetrachloroethylene	–	–	–	–	0.45–4.0	4.5–44.0
Tetrahydrocannabinol (THC)	<0.019	<0.19	–	–	–	–
Thallium	<0.008	<0.08	>0.1	>1	0.05–1.10	0.5–11.0
THC (tetrahydrocannabinol)	<0.019	<0.19	–	–	–	–
Theophylline (aminophylline)	1–2	10–20	3–4	30–40	5–25	50–250
Thiocyanate	0.6–2.9	6–29	–	–	–	–
Thiocyanate (met: nitroprusside)	0.55–2.9	5.5–29	>10	>100	20	200
Thiopental (pentothal)	0.1–4.2	1–42	>0.7	>7	1–40	10–400
Thioridazine (mellaril)	0.01–0.26	0.1–2.6	>0.5	>5	0.1–1.8	1–18
Thioridazine (mellaril) (+met: mesoridazine)	0.03–0.40	0.3–4.0	–	–	–	–
Thiothixene (navane)	0.001–0.010	0.01–0.10	–	–	–	–
Thorazine (chlorpromazine)	0.001–0.050	0.01–0.50	0.1–0.2	1–2	0.3–1.2	3–12
Tiagabine (gabitril)	0.0001–0.0234	0.001–0.234	–	–	–	–
Tigan (trimethobenzamide)	0.1–0.2	1–2	–	–	–	–
Timolol (blocadren)	0.004–0.023	0.04–0.23	–	–	–	–
Tin	0.012–0.014	0.12–0.14	–	–	–	–
Tobramycin (nebcin)	0.16–0.78	1.6–7.8	–	–	–	–
Tocainide (tonocard)	0.4–1.0	4–10	–	–	–	–
Tofranil (imipramine)	0.015–0.0105	0.15–0.105	0.05–0.15	0.5–1.5	0.28–0.85	2.8–8.5
Tofranil (imipramine) (+met: desipramine)	0.015–0.025	0.15–0.25	–	–	–	–
Tolbutamide (orinase)	4.3–9.6	43–96	–	–	64	640
Tolectin (tolmetin)	3.7	37	>6	>60	–	–

Table 1 (*Continued*)

Drug	Therapeutic or normal		Toxic		Lethal	
	(mg%)	(μg/ml)	(mg%)	(μg/ml)	(mg%)	(μg/ml)
Norfluoxetine (met: fluoxetine (prozac))	0.0018–0.0466	0.018–0.466	-	-	0.09–0.5	0.9–5.0
Normodyne (labetalol, trandate)	0.0036–0.0271	0.036–0.271	-	-	-	-
Norpace (disopyramide)	0.2–0.6	2–6	0.7	7	2.6	26
Norpramin (desipramine) (met: imipramine (tofranil))	0.005–0.0684	0.05–0.684	>0.05	>0.5	1–2	10–20
Nortriptyline (aventyl) (met: amitriptyline (elavil))	0.005–0.0375	0.05–0.375	0.05	0.5	1.3	13
Norverapamil	0.0160–0.0207	0.160–0.207	-	-	-	-
(met: verapamil (calan, isoptin))	0.4–0.8	4–8	1	10	>2	>20
Norvir (ritonavir)	1.1–6.6	11.2–66.0	-	-	-	-
Novocaine (procaine)	0.02–1.30	0.2–13.0	>2.1	>21	-	-
O						
O-demethylencainide (met: encainide)	0.01–0.03	0.1–0.3	-	-	-	-
Olanzapine (zyprexa)	0.0009–0.0023	0.009–0.023	-	-	0.12	1.2
Ondansetron (zofran)	0.0022–0.0114	0.022–0.114	-	-	-	-
Orinase (tolbutamide)	4.3–9.6	43–96	-	-	64	640
Orphenadrine (norflex)	0.003–0.085	0.03–0.85	0.2	2	0.4–0.8	4.0–8.0
Orudis (ketoprofen)	0.5–0.15	5–1.5	-	-	-	-
Oxalate	0.2	2	-	-	1–11	10–110
Oxaprozin (daypro)	0.01–0.04	0.1–0.4				
Oxazepam (serax)	0.015–0.140	0.15–1.4	>0.2	>2	-	-
Oxycodone (percodan, oxycontin)	0.001–0.010	0.01–0.10	0.02–0.50	0.2–5.0	-	-
Oxycontin (oxycodone, percodan)	0.001–0.010	0.01–0.10	0.02–0.50	0.2–5.0	-	-
Oxyphenbutazone (tandearil)	1.1–11.8	11–118	-	-	-	-
P						
Pancuronium (pavulon)	0.009–0.022	0.09–0.22	-	-	0.16	1.6
Papaverine	0.025–0.400	0.25–4.00	-	-	-	-
Paradione (paramethadione)	0.11–0.50	1.1–5.0	-	-	-	-
Paraldehyde	2.0–33.2	20–332	20–40	200–400	>50	>500
Paramethadione (paradione)	0.11–0.50	1.1–5.0	-	-	-	-
Para-methoxyamphetamine (PMA)	-	-	-	-	0.02–0.49	0.2–4.9
Paraquat	-	-	0.06–0.32	0.6–3.2	>1.5	>15
Parathion	-	-	-	-	0.05–3.40	0.5–34.0
Parnate (tranylcypromine)	0.005	0.05	-	-	-	-
Paroxetine (paxil)	0.0031–0.0062	0.031–0.062	-	-	0.14–0.34	1.4–3.4
Pavulon (pancuronium)	0.009–0.022	0.09–0.22	-	-	0.16	1.6
Paxil (paroxetine)	0.0031–0.0062	0.031–0.062	-	-	0.14–0.34	1.4–3.3
PCP (phencyclidine)	-	-	0.0007–0.0240	0.007–0.240	0.1–0.5	1–5
Pemoline (cylert)	0.07–0.62	0.70–6.2	-	-	-	-
Pentachlorophenol	-	-	-	-	>4.6	>46
Pentazocine (talwin)	0.003–0.100	0.03–1.00	0.2–0.5	2–5	>0.03	>0.3
Pentobarbital (nembutal)	0.1–0.3	1–3	>0.5	>5	1.0–16.9	10–169
Pentothal (thiopental)	0.1–4.2	1–42	>0.7	>7	1–40	10–400
Pentoxifylline (trental)	0.006–0.16	0.06–1.6	-	-	>0.6	>6.0
Pepcid (famotidine)	0.0007–0.0035	0.007–0.035	-	-	-	-
Percodan (oxycodone)	0.001–0.010	0.01–0.10	0.02–0.50	0.2–5.0	-	-
Perphenazine (trilafon)	0.00004–0.00300	0.0004–0.0300	0.1	1	-	-
Phenacetin	0.01–2.00	0.1–20.0	>3	>30	-	-
Phencyclidine (PCP)	-	-	0.0007–0.0240	0.007–0.240	0.1–0.5	1–5
Phendimetrazine	0.002–0.024	0.02–0.24	-	-	-	-
Phenelzine (nardil)	0.0001–0.0002	0.001–0.002			>0.15	>1.5
Phenergan (promethazine)	0.0006–0.0099	0.006–0.099	-	-	0.24–1.2	2.4–12
Phenmetrazine	0.004–0.024	0.04–0.24	-	-	0.4	4
Phenobarbital	1–4	10–40	4–6	40–60	>8	>80



DEFENDANT'S
EXHIBIT
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Thiopental concentration

DEFENDANT'S EXHIBIT

PETITIONER'S BRIEF

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IN THE

Supreme Court of the United States

RALPH BAZE, et al,
Petitioners,

v.

JOHN D. REES, et al.,
Respondents.

ON WRIT OF CERTIORARI TO THE SUPREME COURT OF KENTUCKY

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November 5, 2007

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QUESTIONS PRESENTED

I. Does the Eighth Amendment to the United States Constitution prohibit means for carrying out a method of execution that create an unnecessary risk of pain and suffering as opposed to only a substantial risk of the wanton infliction of pain?

II. Do the means for carrying out an execution cause an unnecessary risk of pain and suffering in violation of the Eighth Amendment upon a showing that readily available alternatives that pose less risk of pain and suffering could be used?

III. Does the continued of sodium thiopental, pancuronium bromide, and potassium chloride, individually or together, violate the cruel and unusual punishment clause of the Eighth Amendment because lethal injections can be carried out by using other chemicals that pose less risk of pain and suffering?

LIST OF PARTIES

Pursuant to Supreme Court Rule 24.1(b), the following list identifies all of the parties before the Kentucky Supreme Court.

Ralph Baze and Thomas C. Bowling were the appellants below. They are the Petitioners in this action. John D. Rees, Glenn Haeberlin, and Ernie Fletcher, were appellees below.

Glenn Haeberlin has since been replaced by Thomas Simpson as Warden of the Kentucky State Penitentiary. Pursuant to Supreme Court Rule 35.3, Warden Simpson has been substituted as a party.

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Deborah W. Denno, The Lethal Injection Quandary: How Medicine Has Dismantled The Death Penalty, 76 Fordham L. Rev. 49 (2007) 3, 4, 5, 6, 7

Deborah W. Denno, When Legislatures Delegate Death: The Troubling Paradox Behind State Uses Of Electrocution And Lethal Injection And What It Says About Us, 63 Ohio St. L.J. 63 (2002) 2, 9

Joe Farmer, *Rector, 40, Executed for Officer's Slaying,* Arkansas Democrat-Gazette, Jan. 25, 1992, at 1 9

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United States Department of Justice, Bureau of Justice Statistics, Table 2, *available at* http://www.ojp.usdoj.gov/bjs/pub/pdf/cp05.pdf(last visited Nov. 4, 2007) 3, 4

United States Department of Justice, Bureau of Justice Statistics, *available at* http://www.ojp.usdoj.gov/bjs/data/exest.csv (last visited Nov. 4, 2007) 7

Witnesses to a Botched Execution, St. Louis Post-Dispatch, May 8, 1995, at 6B 9

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The decision of the Kentucky Supreme Court, reported at 217 S.W.3d 307 (Ky. 2006), is reprinted at J.A. 798-809. The unpublished decision of the Franklin Circuit Court is reprinted at J.A. 754-769. The order of the Kentucky Supreme Court denying rehearing is reprinted at Pet. App. 11.

JURISDICTION

The Kentucky Supreme Court issued its decision on November 22, 2006, and denied the timely petition for rehearing on April 19, 2007. The petition for a writ of certiorari was filed on July 11, 2007. This Court has jurisdiction pursuant to 28 U.S.C. § 1257(a).

CONSTITUTIONAL PROVISION INVOLVED

This case involves the Eighth Amendment to the Constitution, which provides in relevant part: "Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted." U.S. Const. amend. VIII.

STATEMENT OF THE CASE

A. Evolution Of Methods Of Execution

The evolution of execution methods in this country reflects a continuing quest to find a more humane means of killing, as each new method turns out to be less humane than intended. The problems are not always perceived as promptly as they could be, but their perception produces change aimed at eliminating unnecessary dangers of severe pain.

Hanging. In the 19th century, hanging was the predominant method of execution in the United States. Deborah W. Denno, *Getting to Death: Are Executions Constitutional?*, 82 Iowa L. Rev. 319, 364-65 (1997) (noting that 48 States or territories conducted executions by hanging in the 19th century). At the beginning of the 20th century, hanging was superseded by electrocution and gas, because of a recognition that hanging subjected inmates to the risk of an unnecessarily painful and prolonged death *In re Storti*, 60 N.E. 210, 210 (Mass. 1901) (Holmes, C.J.) (explaining that the rejection of hanging and adoption of electrocution was "was devised for reaching the end proposed as swiftly and painlessly as possible"). By 1913, 35 States had abandoned hanging. Today, no State relies on hanging as a method of execution.[1] Deborah W. Denno, *When Legislatures Delegate Death: The Troubling Paradox Behind State Uses Of Electrocution And Lethal Injection And What It Says About Us*, 63 Ohio St. L.J. 63, 129 (2002).

Electrocution. After its introduction in the late 19th century, electrocution was widely hailed as a new, humane method of execution that took advantage of scientific advances to ensure a quick death. *See, e.g., In re Kemmler*, 136 U.S. 436, 444 (1890) (upholding New York's electrocution statute and noting it was the product of a commission charged with identifying the "most humane and practical method known to modern science of carrying into effect the sentence of death"); *Malloy v.*

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[1] Two States allow the condemned to choose hanging. Denno, 63 Ohio St. L.J. at 129.

South Carolina, 237 U.S. 180, 185 (1915) ("Influenced by the results in New York, eleven other States have adopted the same mode for inflicting death in capital cases; and, as is commonly known, this result is the consequent of a well grounded belief that electrocution is less painful and more humane than hanging.") (footnote omitted); 1923 Tex. Gen. Laws ch. 51, §§ 1, 14 (changing from hanging to electrocution and referring to the "fact" that hanging "is antiquated and has been supplanted in many states by the more modern and humane system of electrocution."). Over time, botched electrocutions (people catching on fire, bleeding) led to increasing concern as to whether electrocution was humane. *State v. Gee Jon*, 211 P. 676, 682 (Nev. 1923) (noting Nevada's adoption of lethal gas over electrocution due to concerns about the humaneness of electrocution); *Denno*, 82 Iowa L. Rev. at App. 2A (detailing 18 botched electrocutions since 1979). Today, only Nebraska relies on electrocution.[2] Deborah W. Denno, *The Lethal Injection Quandary: How Medicine Has Dismantled The Death Penalty*, 76 Fordham L. Rev. 49, 93 (2007).

Lethal gas. Like electrocution, lethal gas was initially thought to be a humane improvement. *Gee Jon*, 211 P. at 682. Once again, botched executions eventually caused States to abandon the method. *Denno*, 82 Iowa L. Rev. at 367-68 (explaining that

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[2] Nine States allow inmates sentenced to death before a certain date to choose electrocution. United States Department of Justice, Bureau of Justice Statistics, Table 2, *available at* http://www.ojp.usdoj.gov/bjs/pub/ pdf/cp05.pdf (last visited Nov. 4, 2007).

"Jesse Bishop, the first person to die from lethal gas following *Gregg* in 1979, appeared to experience such pain and agony that Nevada abolished lethal gas and changed to lethal injection."). Even when administered as intended, lethal gas often yielded disturbing results. *Gomez v. United States District Court*, 503 U.S. 653, 655 (1992) (Stevens, J., dissenting) ("Execution by gas ... produces prolonged seizures ... flailing, twitching of extremities, and grimacing" and causes "asphyxiation by suffocation or strangulation.") (ellipsis in original). Today, no State relies on lethal gas as a method of execution.[3] Denno, 76 Fordham L. Rev. at 59-60 n.51.

B. Lethal Injection.

1. The Genesis Of The Three-Drug Protocol.

The three-drug protocol currently used by Kentucky and the other States that have adopted lethal injection was first developed in Oklahoma in 1977, at the behest of a state legislator, who was aided in his endeavor by Dr. Stanley Deutsch, an anesthesiologist, and Dr. Jay Chapman, a medical examiner with no anesthesia training. JA 104-05; Denno, 76 Fordham L. Rev. at 66. The group decided to use a barbiturate anesthetic in combination with a neuromuscular blocker that would paralyze the inmate. But they did not identify specific drugs for

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[3] Four States provide for lethal gas as an alternative to lethal injection, United States Department of Justice, Bureau of Justice Statistics, Table 2, *available at* http://www.ojp.usdoj.gov/bjs/pub/pdf/cp05.pdf (last visited Nov. 4, 2007).

use in the process. *See* Denno, 76 Fordham L. Rev. at 67. The drugs chosen by the Oklahoma Department of Corrections were sodium thiopental, an ultra-short acting barbiturate anesthetic (also known as "thiopental"); and a long-acting paralytic.[4] JA 105. Although Oklahoma uses vecuronium bromide as its paralytic agent, every other State, including Kentucky, eventually chose pancuronium bromide (hereafter, "pancuronium") as the paralytic agent. Denno, 76 Fordham L. Rev. at 78. A third drug, potassium chloride (hereafter "potassium") – which stops the heart but also causes excruciating pain – was later added, perhaps because the original protocol incorrectly stated that potassium was a paralytic agent.[5] JA 105-14; 651-52. The group devising Oklahoma's protocol did not consult any other physicians or veterinarians, conduct any medical or scientific research, or consider how, and by whom, the drugs would be administered in actual executions. JA 418-23; *cf. Beardslee v. Woodford*, 395 F.3d 1064, 1073-74 (9th Cir. 2005) (describing this history).

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[4] John Rees, Commissioner of the Kentucky Department of Corrections was employed by the Oklahoma Department of Corrections in the 1970's and helped draft the State's first lethal injection protocol. JA 249, 259. During the trial in this case, Rees testified that, other than that the chemicals are used in other States, he still does not know why thiopental, pancuronium, and potassium are used instead of different chemicals or a single-chemical formula . *Id.* 257.

[5] The protocol required the "continuous, intravenous administration of a lethal quantity of sodium thiopental combined with either tubo-curarine or succinylcholine chloride or potassium chloride, which is an ultrashort-acting barbiturate combination with a chemical paralytic agent." JA 651-52.

In devising Oklahoma's protocol, Chapman assumed that doctors would inject the drugs. Denno, 76 Fordham L. Rev. at 68 & n.118. Shortly after Oklahoma adopted lethal injection in 1977, he expressed alarm over how the three-drug protocol would be administered in practice. *Id.* at 72 (citing Jim Killackey, *Execution Drug Like Anesthesia*, Daily Oklahoman, May 12, 1977, at 1) ("Dr A. Jay Chapman, state medical examiner, said [in May 1977] that if the death-dealing drug is not administered properly, the convict may not die and could be subjected to severe muscle pain.").

The first lethal injection execution was performed in Texas in 1982. Denno, 76 Fordham L. Rev. at 79. Prior to that execution, Texas's department of corrections considered whether to adopt Oklahoma's three-drug protocol, and in the process, consulted Dr. Gerry Etheredge, a veterinarian. Etheredge suggested that the most reliably humane method of lethal injection would be an overdose of pentobarbital, the anesthetic most commonly used in animal euthanasia. Robbie Byrd, *Informal Talks Opened Door to Lethal Injection*, Oct. 4, 2007, The Huntsville Item, *available at* http://www.itemonline.com/archivesearch/local_story_277004148.html. Veterinary euthanasia methods, such as a lethal dose of pentobarbital, are the product of extensive professional study by veterinarians, undertaken with the goal of ensuring that a painless death can be achieved by personnel with varying levels of training and skill. *See* Br. of Amici Curiae Drs. Concannon, Geiser, and Pettifer in Support of Petitioner 1-4, *Hill v. McDonough*, No. 05-

8794 (S. Ct. 2006). Texas nevertheless rejected Etheredge's suggestion, and adopted Oklahoma's three-drug protocol. JA 112.

Other States followed suit, each adopting the three-drug protocol without conducting any research or analysis.[6] As the trial court found, there is "scant evidence that ensuing State adoption of lethal injection was supported by any additional medical or scientific studies that the adopted form of lethal injection was an acceptable alternative to other methods. Rather, ... the various States simply fell in line relying solely on Oklahoma's protocol." *Id.* 755-56. Today, with one exception, every State that has the death penalty employs lethal injection. Denno, 76 Fordham L. Rev. at 93.

2. Kentucky Adopts The Three-Drug Protocol.

In 1998, the Kentucky legislature adopted lethal injection as a method of execution. *See* Ky. Rev. Stat. § 431.220(a)(1) ("every death sentence shall be executed by continuous intravenous injection of a substance or combination of substances sufficient to cause death"). The task of determining the specific drugs to be used was left to the Department of

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[6] New Jersey's lethal injection protocol calls for the use of only two of the drugs in the standard three-drug formula, omitting the paralytic agent. JA 110. New Jersey has not conducted any executions by lethal injection. United States Department of Justice, Bureau of Justice Statistics, *available at* http://www.ojp.usdoj.gov/bjs/data/exest.csv (last visited Nov. 4, 2007). New Hampshire has adopted lethal injection by statute, but has no formal protocol specifying the chemicals to be used. Denno, 78 Fordham L. Rev. at 126.

Corrections (DOC). JA 760. DOC officials "were provided with little to no guidance on drafting a lethal injection protocol." *Id.*

Instead of seeking medical input and expert advice, DOC officials "were resolved to mirror protocols in other states." *Id.* Accordingly, like other States, the Kentucky DOC adopted the three-drug formula without "any independent scientific or medical studies or consulting any medical professionals concerning the drugs and dosages to be injected into the condemned." *Id.*

Former Warden Phil Parker testified that he "didn't have the knowledge to question [the chemicals] but [had] no reason to because [other States] were doing it ... on a regular basis." JA 226. A Deputy Warden testified that "other States share[d] with us how they had done things" and "we took what they ... verbally gave us, we certainly made ... a mental note of it ... and brought it back." JA 157.

None of the DOC officials involved in drafting the protocol understood why these three drugs were used in other States, or the effect of each drug. JA 73, 142, 159-60. For example, Parker testified that he had "no knowledge" that someone could be paralyzed by pancuronium yet still feel pain. JA 214-15.

Although the DOC went along with the trend in other States, it did so despite evidence that by 1998, numerous botched executions had occurred using the

three-drug formula.[7] In 1995, for instance, Missouri's execution of Emmitt Foster caused a flurry of press coverage after Foster began convulsing and gasping on the gurney. *See Witnesses to a Botched Execution*, St. Louis Post-Dispatch, May 8, 1995, at 6B. And in 1992, Arkansas executioners were unable to find a vein in Ricky Rector, causing them to make a two-inch incision in Rector's arm in an attempt to find a vein. Rector was heard moaning throughout the fifty-minute process. Joe Farmer, *Rector, 40, Executed for Officer's Slaying*, Arkansas Democrat-Gazette, Jan. 25, 1992, at 1. In fact, the Kentucky legislature itself had earlier identified these problems, noting that "[s]ome doctors claim that prisoners could strangle or suffer excruciating pain during the chemical injections but may be prevented by the paralytic agent from communicating their distress," and "[t]here have been claims of botched executions." Legislative Research Committee, *Issues Confronting The 1998 General Assembly, Informational Bulletin No.* 198, at 99 (Sept. 1997), *available at* www.lrc.ky.gov/lrcpubs/Ib198.pdf (internal quotation marks omitted).

In 1999, Kentucky performed its first and only lethal injection execution, that of Eddie Lee Harper. JA 167. Because pancuronium hides signs of consciousness, there is no way to know whether Harper's execution was humane.

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[7] *See, e.g.*, Denno, 63 Ohio St. L.J. at 139-141 (detailing 31 botched lethal injection executions); Denno, 76 Fordham L. Rev. at 56-58 (discussing other botched lethal injection executions).

C. Kentucky's Lethal Injection Procedures.

Kentucky's execution procedures combine the dangerous three-drug formula copied from Oklahoma and other States with haphazard drug administration procedures carried out by unqualified execution personnel.

1. The Three-Drug Formula.

The formula that Kentucky adopted from other States consists of three drugs, the combination of which Dr. Mark Heath, Petitioners' expert anesthesiologist, characterized as "bizarre" because it employs a short acting barbiturate with a long acting paralytic followed by "an extremely painful way of stopping the heart." JA 426-27. The effects of the three drug formula were undisputed at trial.

Thiopental, the first drug injected, is a barbiturate anesthetic that must be mixed into solution shortly before it is used. *Id.* 430. Thiopental was frequently used to induce anesthesia in the 1970s, when the three-drug formula was first developed, because its ultra-short acting nature rendered it easy to use in conjunction with the longer-acting anesthetics that would keep patients anesthetized throughout surgery. *Id.* 429. Thiopental is rarely used today, and is almost never employed as the sole agent of anesthesia. *Id.* 429-31; 628.

The second drug, pancuronium, masks visible suffering by paralyzing the inmate's voluntary muscles. *Id.* 413-14. It has no analgesic or anesthetic properties, and therefore does not reduce consciousness or pain. *Id.* 436. A person given pancuronium alone would be conscious but paralyzed

and unable to breathe, and would eventually suffocate to death. *Id.* 437. The paralysis pancuronium causes would also preclude a person from communicating pain or distress. As Dr. Heath explained, "[a]ny person or animal who'd been given pancuronium, they are going to appear serene and tranquil and peaceful and comfortable, regardless of whether they are in fact awake and in agony." *Id.* 441. Carol Weihrer, who has experienced conscious paralysis (also called anesthesia awareness) during surgery, testified that being awake while paralyzed "was the worst thing in your life. You, you are absolutely entombed in a corpse. You cannot move, but you are a hundred percent alert. It's terrible." *Id.* 397. Dr. Mark Dershwitz, the DOC's expert witness in this case, described the sensation as "agonizing," and "scary." *Id.* 625-26.

The last drug injected, potassium, induces cardiac arrest. *Id.* 427, 561. When administered to a conscious person in concentrations sufficient to stop the heart, potassium causes excruciating pain. *Id.* 443-44. Dr. Dershwitz opined that a conscious person given potassium at the concentration level Kentucky uses would be "screaming" in agony. *Id.* 600, 604.

It is undisputed that "the administration of pancuronium bromide and potassium chloride, either separately or in combination, would result in a terrifying, excruciating death" if injected into a conscious person, *Harbison v. Little*, No. Civ. 3:06-1206, --- F. Supp. 2d ---, 2007 WL 2821230, at *11 (M.D. Tenn. Sept. 19, 2007). Consequently, inducing general anesthesia is "critical," as Dr. Dershwitz put

it, to ensuring a humane execution. JA 558. General anesthesia – the level of anesthesia sufficient to prevent the sensation of severe pain, *id.* 407 – is necessary because the pain of potassium is similar in intensity to a "surgical stimulus," *id.* 604, and could be felt by someone who is only lightly anesthetized, *id.* 406-07. If the intended dose of thiopental is not injected successfully, or does not bring about general anesthesia, the inmate will experience both the terror and agony of conscious suffocation and the excruciating pain caused by the potassium, but will appear peaceful and unconscious to observers. *Id.* 437, 441-42, 445. This drug combination is so sensitive to error and potentially inhumane that Kentucky law, like that of many other States, prohibits its use in animal euthanasia without anesthetic monitoring by trained professionals. *See* Ky. Rev. Stat. § 258.095(12); JA 458-59.

2. Kentucky's Drug Administration System.

Despite these risks, Kentucky officials developed a convoluted drug delivery system that creates a significant likelihood of improper administration of the anesthesia.

Drug Preparation. At the outset of the execution procedure, the execution team must prepare the dose of thiopental and load it into syringes, a complicated process with numerous opportunity for errors. The three-gram dose of thiopental must be constituted from up to six separate kits of .5 grams of powder, JA 656, 844, 847, each of which must be individually mixed with solution. Although Dr. Dershwitz

testified that the physical act of mixing thiopental is simple, *id.* 623, the combination of several thiopental kits and accompanying calculations are difficult tasks for those who do not prepare drugs in their day-to-day job, and can lead to an insufficient dose of thiopental. *Id.* 472-73. Because three grams of thiopental is a dose rarely used in the medical context, the package insert does not contain instructions for combining several separate kits and drawing the solution up into one or more syringes. *Id.* 656-76. The thiopental packaging states that the only people who should mix or administer the sodium thiopental are those "trained and experienced in the administration of intravenous anesthetics." *Id.* 528-29. The EMTs and phlebotomists responsible for mixing the thiopental in Kentucky have *not* been trained "in the administration of intravenous anesthetics." *Id.* 529. Nor does the execution protocol specify the concentration of thiopental or provide any mixing instructions, even though the mixer must "know[] the concentration and volume" in order to create the proper dose. Id. 472-73, 987.

IV Problems. As DOC officials realized, ensuring reliable IV access is both difficult and crucial. Phil Parker, the Warden who wrote Kentucky's execution protocol, testified that problems include "the I.V. failing [after the injection started] for what we could call, just in common language, a 'blowout' ... by pushing or injecting too vigorously or too hard." *Id.* 217. A DOC nurse testified that different drugs have different prescribed rates of injection, and that to ensure that a chemical is not injected too vigorously, she would consult a book on how fast to inject the

chemicals. *Id.* 355-56. Yet, the execution protocol does not specify the rate at which the chemicals are to be injected, or how to determine that rate. *See generally id.* 912, 978-79.

IV infiltration – the condition that occurs when a catheter is not inserted completely into a vein, or goes through the vein – is a frequent occurrence even in clinical settings, *id.* 463, particularly in prisoners, who often have veins compromised by drug use. *Id.* 359, 772. If undetected, infiltration can result in the delivery of insufficient thiopental to induce general anesthesia, but sufficient pancuronium and potassium to paralyze and cause pain.[8] *Id.* 461-65. An insufficient dose of thiopental can also result from leaks in the IV tubing, a partially dislodged catheter, and syringe errors. *Id.* 462-63.

Kentucky's protocol provides that the IV team – an emergency medical technician (EMT) and a phlebotomist – will place two separate catheters in peripheral veins. The team is allowed up to an hour to do so. *Id.* 285-86, 288, 976. Petitioners presented unrebutted expert testimony that if it is not possible to place a reliable IV in an individual within ten or fifteen minutes, that person probably does not have peripheral veins susceptible to a reliable IV

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[8] For instance, if an infiltration, leak, or other IV problem result in only 40% of each of the drugs reaching the inmate's circulation, the inmate would receive a dose of thiopental insufficient to fully anesthetize the inmate, but sufficient pancuronium and potassium to cause paralysis and excruciating pain, respectively. This may be what occurred during the December 2006 execution of Angel Diaz. See *infra* pages 20 to 21.

placement.[9] *Id.* 474-76. Kentucky officials nevertheless decided, without consulting any doctors or other medical personnel, to require IV personnel to attempt to insert the IV lines for a full hour, thereby increasing the potential for improperly placed catheters and resulting failure in the delivery of anesthetic. *Id.* 256, 476, 976.

Further compromising the reliability of the IV insertion, the execution protocol instructs those inserting the IVs to "look for the presence of blood in the valve of the sited needle." *Id.* 976. Dr. Mark Heath, Petitioners' expert anesthesiologist, testified this procedure "really doesn't make any sense at all. There is no valve in the sited needle," and checking for a flash of blood is insufficient to determine whether an IV has been successfully inserted. *Id.* 466-67.

Moreover, Kentucky has also decided to leave the choice of which of the two IV lines should be used to inject the drugs to the warden, who has *no* expertise in IV insertion, even though the personnel who placed the IV lines would have a better sense of which catheter is more reliable. *Id.* 315. As the warden put it, "I try to determine in my mind which, which IV site I feel is the best" based on which IV

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[9] In such individuals, it may be necessary to place a central line in a larger vein to obtain reliable IV access. Central line placement is an invasive procedure that must be performed by a doctor or a professional with special training. The DOC has no procedure for placing a central line if necessary, JA 477, 976; and it was undisputed at trial that EMTs and phlebotomists are, except in rare cases, unable to place central lines. *Id.* 478.

site produces a larger flash of blood when the needle is inserted. *Id.*

Inadequate Facilities. The arrangement of Kentucky's execution facility makes problems of administration more likely and hinders their detection. The facility consists of a control room, execution chamber, and witness rooms. *Id.* 203. The inmate is strapped to a gurney in the center of the execution chamber. *Id.* 266. The execution team administers the drugs to the inmate remotely, from the control room, necessitating the use of IV tubing that snakes from the control room through a small hole in the wall, across the execution chamber, and to the inmate on the gurney. *Id.* 280. The execution team is separated from the inmate by one-way glass, *id.* 204-05, and is unable to see the side of the inmate facing away from the control room window.

Although the EMT and the phlebotomist are situated in the control room during the execution, they play no role in injecting the drugs. That task is performed by an executioner without medical training, who could be a different person for each execution. *Id.* 287.

From the control room vantage point, the execution team has only limited ability to monitor the condemned inmate. Team members are unable to monitor any catheter sites on the side of the inmate facing away from the control room window. The Warden and Deputy Warden are the only personnel in the execution chamber, but are at least ten feet from the gurney. *Id.* 276-77. The warden conceded that he cannot see both catheter sites, and

in any event, visual observation of the catheter sites is insufficient to determine whether a catheter is improperly inserted. *Id.* 340. The warden also stated that he will be too far away from the inmate to discern subtle signs of consciousness, such as tearing, *id.* 284, and Petitioners' expert anesthesiologist testified that observation from ten feet away, even if performed by a medically trained individual, is ineffective to determine consciousness. *Id.* 442, 462-63.

Untrained Personnel. The only medically trained personnel who have any role in the execution process are an EMT and a phlebotomist who insert the IVs. Although EMTs and phlebotomists are facially qualified to insert IV catheters, they have no experience with the numerous other tasks performed in an execution, including preparing the drugs, making the calculations necessary to prepare a three-gram dose of thiopental, detecting signs of inadequate anesthesia, or reacting to foreseeable contingencies such as a compromised IV line. *Id.* 529-30. EMTs and phlebotomists have only minimal medical expertise. Under Kentucky law, they are permitted to function only under the direct supervision of a doctor. Ky. Rev. Stat. § 311A.170 (EMT paramedic).[10] The Warden never inquired into these team members' ability to carry out the execution protocol and react to foreseeable problems. He simply assumed that "[t]hey probably at least have some medical experience in being able to" prepare doses of intravenous anesthetic, and that

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[10] Petitioners are aware of no licensing requirements in Kentucky for phlebotomists.

"given the gravity of the situation that is occurring, those people know what to do." JA 312, 279.

The warden and deputy warden have ultimate authority for the execution procedure. *Id.* 262. Yet they have no understanding of the foreseeable problems that can arise during the procedure or how to react to them. For instance, the warden admitted "I honestly don't know what you'd look for" to tell the difference between an inmate who is paralyzed but conscious and an inmate who is anesthetized. *Id.* 283. Likewise, when asked what knowledge he has of anesthesia awareness or conscious paralysis, Deputy Warden Persning responded, "none." *Id.* 336.

In addition, although the warden is responsible for deciding what to do if the primary IV line becomes compromised, he testified that he would simply direct the execution team to move to the backup line, without first inquiring whether the IV problem prevented the full dose of thiopental from being injected. *Id.* 279-80, 318. This would be the worst possible way to react in this situation, as it creates the danger that the inmate will be given an insufficient amount of thiopental through the first, compromised IV, but then will receive the full doses of pancuronium and potassium through the backup IV.[11]

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[11] Although the protocol provides that the team will administer additional thiopental if the inmate does not "appear" unconscious to the warden after 60 seconds, that instruction will not prevent an error of this kind. If the inmate receives enough thiopental through the compromised IV to be lightly anesthetized, the inmate will "appear" unconscious. If the team realizes that the IV is compromised after that point, Haeberlin

No Monitoring. No one on the execution team examines the IV site for problems after the IV is inserted. *Id.* 977. Because the IV team leaves the execution chamber before the chemicals are injected, the Warden and a Deputy are the only officials in the room with the inmate. *Id.* 977-78, 328-29, 276. But even they are too far away from the inmate to observe IV problems, and are unqualified to make medical assessments in all events. *See supra* pages 16 to 17. And while the executioner is expected to determine from the control room whether the drugs are being injected into the vein by the feel of the syringe, he has no experience or training in "sensing how much resistance there is to the injection of the fluid." JA 462-63.

Moreover, Kentucky makes no meaningful effort to monitor the inmate to ensure that he or she is unconscious throughout the execution. This is a particularly dangerous omission given the paralyzing effect of pancuronium. The testimony was undisputed that effective monitoring requires trained personnel to monitor the inmate from the same room, aided by machines, such as an EKG machine, BIS Monitor, EEG machine, or a blood pressure cuff. *Id.* 420-23, 602. The DOC does not use trained personnel to monitor anesthetic depth, or provide equipment designed to aid in that assessment. *Id.* 764.

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would instruct them to continue with the backup IV line, JA 279-80, 318 – without first administering any additional thiopental to ensure the necessary general anesthesia.

No Execution Training. Execution team members are not given special training to perform executions, except for a monthly practice session that involves setting practice IVs into other team members. *Id.* 190, 984. Execution personnel do not rehearse responses to problems that could occur during executions, or practice preparing the thiopental and loading them into syringes. Nor are they given any instruction on the effects of the drugs.

3. The Experience Of Other States With Execution Procedures Like Kentucky.

Having performed only one execution since Kentucky adopted lethal injection in 1998, Kentucky's execution personnel do not have an extensive track record of implementing the three-drug protocol. The experience of other States that perform executions more frequently, such as Missouri, Florida, Ohio, Tennessee, and California, reveals that procedural deficiencies very similar to those in Kentucky have led directly to botched executions and insufficient induction of general anesthesia. Their experience demonstrates that the combination of the dangerous three-drug protocol with complex administration procedures and poorly trained personnel renders foreseeable errors and botched executions inevitable over time.

The most recent example is Florida's execution of Angel Diaz. The execution personnel inserted both the primary and backup IVs improperly, and both catheters perforated Diaz's veins. The infiltration occurred even though the personnel saw the flash of blood that the Kentucky protocol describes as the

appropriate indicator of catheter reliability. *See* Summary of the Findings of the Dep't of Corrections Task Force Regarding the Dec. 13, 2006 Execution of Angel Diaz, at 5 (Dec. 20, 2006) ("Diaz Findings"). The execution team, injecting the drugs from another room as in Kentucky, attempted to inject the thiopental into the first IV. When they experienced difficulty injecting the dose, they switched to the second IV and injected the pancuronium and potassium, *id.* – precisely what Warden Haeberlin testified he would do in this situation, JA 279-80, 318. As a result, Diaz apparently received an inadequate dose of thiopental, and exhibited the gasping behavior consistent with partial paralysis from the pancuronium until he died 34 minutes later. Proceedings of the Governor's Comm'n on Lethal Injection, at 97-98, 101 (Feb. 12, 2007). Despite these difficulties, the execution team continued to attempt to push additional doses of each of the drugs into the two infiltrated IVs. *See* Diaz Findings, at 5. An autopsy revealed 12-inch chemical burns on each arm where the drugs were injected into the tissue surrounding the vein. *See* The Governor's Comm'n on Administration of Lethal Injection, II Record of Proceedings: Comm'n Meeting Packets (Feb. 12, 2007) (Postmortem Exam of Angel Diaz, at 1). As in Kentucky, at least one team member was present in the chamber with Diaz, but no team members noticed any signs of the infiltration that occurred, and no team members knew how to react when the first IV became compromised. *See* Diaz Findings at 5.

Similarly, during the Ohio execution of Joseph Clark, execution team members who, like Kentucky team members, had paramedic-level training, were unable to place reliable IVs. JA 785. After the execution began, Clark sat up and said "It don't work." Execution team members then closed the curtains and spent 40 minutes attempting to re-place the IVs, as Clark moaned from behind the curtains. JA 782, 790. Ninety minutes after the execution process began, the curtains opened to reveal Clark dead. JA 787.

California has employed execution personnel who are substantially more qualified than those used in Kentucky – a combination of registered nurses and EMTs, as well as a doctor observing the process and recording vital signs – but nevertheless has experienced six aberrant executions among the eleven that it has performed by lethal injection. *Morales v. Tilton*, 465 F. Supp. 2d 972, 975 (N.D. Cal. 2006). As in Kentucky, team members did little training for executions, and never practiced mixing the thiopental. *Id.* at 979 & n.7. As a result, the registered nurses – who, like EMTs and phlebotomists, do not prepare IV anesthetics as part of their daily responsibilities – became confused while preparing the thiopental dose, and were unable to follow the directions on the thiopental packaging. *Id.* at 980. The nurses failed to set a backup IV line in at least one execution. Despite awareness of the problem, the execution personnel's only response was "sh-t does happen," and the execution proceeded. *Id.* at 979 & n.8. That execution took far longer than usual and the inmate exhibited signs consistent with

insufficient anesthesia. *Morales v. Hickman*, 415 F. Supp. 2d 1037, 1045 & n.13 (N.D. Cal. 2006), *aff'd per curiam*, 438 F.3d 926 (9th Cir.), *cert. denied*, 546 U.S. 1163 (2006). Several other executed inmates continued to breathe for far longer than they should have if they had received the full dose of thiopental. But the observing doctor and nurses, untrained in anesthesia, did not recognize the significance of the continued breathing. *Morales*, 465 F. Supp. 2d at 975.

Similar problems have plagued Missouri, where prison officials delegated complete responsibility for the execution procedures to a board-certified surgeon. Missouri officials testified that they relied on the medical expertise of the surgeon – expertise they assumed he must have, just as Kentucky officials have made assumptions about the EMT and phlebotomist. *Taylor v. Crawford*, No. 05-4173-CV-C, 2006 WL 1779035 at *7 (W.D. Mo. June 26, 2006), *rev'd*, 487 F.3d 1072 (8th Cir. 2007), *cert. pending*. The surgeon, who was unfamiliar with the preparation of thiopental, prepared doses of the anesthetic that were significantly lower than the intended dose. *Id.* Because the inmates were given pancuronium, there is no way to know, after the fact, whether they received doses of anesthetic sufficient to render them unconscious.

Finally, in Tennessee, the certified paramedic technicians who are responsible for setting the catheters and who are the only medically trained personnel used in the execution were ignorant of the many problems that can arise when injecting intravenous anesthetics. A court found that this lack

of knowledge, together with the lack of additional training led to the paramedics being "completely unprepared" to perform "the actions they are actually charged with performing." *Harbison*, 2007 WL 2821230, at *3. And, like Warden Haeberlin, Tennessee's personnel were unaware that a flash of blood in an IV is an unreliable indicator of a successful insertion. *Id.* at *17. The court further found that the execution team's remote observation of the inmate through closed-circuit television was insufficient, particularly because infiltration can elude visual observation. *Id.* at *19. These and other failures in the procedures, the court concluded, amounted to a "guarantee" that some executions would be performed improperly. *Id.* at *18.

4. Less Dangerous Alternatives.

Petitioners presented substantial unrebutted evidence at trial that alternative means of accomplishing lethal injection "would carry a much lower risk of causing pain or suffering, much lower risk of an error in administration, much, much lower risk of things going wrong." JA 462. The DOC did not dispute that these alternatives exist, or that they would lessen the danger of pain. To the contrary, the DOC's expert agreed. *Id.* 627-28.

Because each of the drugs in the three-drug formula is independently lethal, *id.* 492, 547, pancuronium and potassium could be omitted, thus eliminating the danger of conscious asphyxiation and excruciating pain. *Id.* 445-46. The resulting protocol, using thiopental (or another barbiturate) as the sole lethal agent, would be far less sensitive to

error, and would allow any injection errors to be detected and corrected without subjecting the inmate to extreme suffering. *Id.* 462. The DOC's expert, Dr. Dershwitz, has even suggested elsewhere that executing by means of an overdose of a barbiturate – the same method used to euthanize animals – would significantly lessen the risk of inhumane executions. *See Harbison*, 2007 WL 2821230, at *3.[12]

Alternatively, the dangers arising from deficient administration could be reduced by monitoring the inmate's anesthetic depth throughout the execution. JA 422-23. Although pancuronium hides evidence of consciousness, *id.* 418, personnel qualified to monitor anesthetic depth, using appropriate equipment, would be able to ensure that corrective measures are taken if the inmate is not adequately anesthetized. *Id.* 418-23, 438-40.

D. Procedural History Of This Action.

Petitioners filed this action in the Franklin Circuit Court on August 9, 2004 challenging the chemicals and procedures Kentucky uses to carry out lethal injection. *Id.* 10. Petitioners were granted only limited discovery, and were not allowed to depose members of Kentucky's execution team. Tr. 195, 1248. At trial, Petitioners presented testimony from 18 witnesses, including an expert anesthesiologist, the Commissioner of the Kentucky Department of Corrections, and a variety of other

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[12] Veterinarians use a long-acting barbiturate, pentobarbital, as the predominant means of animal euthanasia because of its simplicity and humaneness. JA 457-58.

prison officials who had first-hand experience with the execution process. The Commonwealth presented testimony from two witnesses: the Commissioner and an anesthesiologist.

On July 8, 2005, the trial court entered an order upholding Kentucky's lethal injection statute. JA 754. As an initial matter, the trial court found that Kentucky "did not conduct any scientific or medical studies or consult any medical professionals concerning the drugs and dosages to be injected into the condemned." *Id.* 760. It then addressed only two claims of maladministration, finding that there was a "minimal risk" that the drugs would be mixed improperly, and that the executioners would have only "minor difficulty" in locating a vein. *Id.* 761-62. It made no findings concerning the training of execution team members, the appropriateness of Kentucky's IV system (which requires the executioner to be in a separate room from the inmate), or the adequacy of Kentucky's monitoring to ensure that the condemned prisoner is adequately anesthetized.

The trial court held that the Eighth Amendment required Petitioners to demonstrate a "substantial risk of wanton and unnecessary infliction of pain." *Id.* 759. The court found this standard unsatisfied, concluding that Petitioners had "not demonstrated by a preponderance of the evidence that Kentucky's method of execution by lethal injection inflicts unnecessary physical pain," and that the "Eighth Amendment [does] not provide protection against *all* pain, only cruel and unusual pain." *Id.* 766.

Petitioners appealed to the Supreme Court of Kentucky. In discussing the Eighth Amendment standard, the court stated: "The method of execution must not create a substantial risk of wanton or unnecessary infliction of pain, torture or lingering death," and "the prohibition against cruel punishment does not require a complete absence of pain." *Id.* 800, 805, 807. The court recognized that "conflicting medical testimony prevents us from stating categorically that a prisoner feels no pain," *id.* 807, but apparently found that a "substantial risk" of pain was not present. The court therefore concluded that "[t]the lethal injection method used in Kentucky is not a violation of the Eighth Amendment to the United States Constitution." *Id.*

SUMMARY OF ARGUMENT

The Eighth Amendment prohibits the "unnecessary and wanton infliction of pain." *Gregg v. Georgia*, 428 U.S. 153, 173 (1976). In the capital punishment context, the Eighth Amendment's prohibition on the "gratuitous infliction of suffering," *id.* at 183, requires States to avoid inflicting more pain than is necessary to cause death.

This prohibition applies fully to the manner in which a government carries out executions, not merely to its choice of particular execution methods. Even an execution method such as lethal injection that is humane in theory can be carried out by means of flawed or haphazard procedures that create a foreseeable danger of inflicting severe pain in actual practice. Performed repeatedly over time in the absence of adequate safeguards, such a method

of execution will inevitably involve the infliction of gratuitous pain in some executions. Inflicting gratuitous pain on a subset of condemned prisoners is no more tolerable than inflicting gratuitous pain on all condemned prisoners. A State therefore violates the Eighth Amendment when its execution procedures create a significant and unnecessary risk of inflicting severe pain that could be prevented by the adoption of reasonable safeguards.

Kentucky's three-drug lethal injection protocol violates this bedrock Eighth Amendment requirement. It is undisputed that a condemned prisoner injected with pancuronium and potassium will suffer torturous pain and agonizing death if the prisoner has not been properly anesthetized – but will be unable to alert anyone to this suffering, and will appear serene and comfortable to the executioners and other observers while enduring an excruciating death. It is also undisputed that Kentucky could easily eliminate the risk of such suffering by forgoing the use of pancuronium and potassium, and relying instead on a lethal dose of an anesthetic such as thiopental or pentobarbital – which will produce death in a matter of minutes. The Commonwealth was unable to identify any legitimate penological justification for persisting in the use of the three-drug formula – or even for its refusal to take the alternative step of monitoring the anesthetic depth of executed prisoners.

Kentucky's ill-considered and haphazard lethal injection procedures exacerbate the risk that some condemned prisoners will suffer an excruciating death. At each step, execution personnel are

required to perform complicated tasks for which they have no expertise or training. The IV team must mix thiopental from multiple kits, calculate the appropriate dose, and load it into syringes. The protocol requires the warden to use an unreliable method to determine which IV site to use, and neither he nor any other member of the execution team is qualified or situated to discern signs of consciousness which would signal that the inmate is undergoing a torturous death. The executioner injects the drugs from a remote location, determining by feel alone, and without practice, whether the injection is working. The physical layout of the execution chamber makes monitoring the catheter sites nearly impossible and renders injection errors more likely. There is no effective observation of the inmate, much less monitoring of anesthetic depth. Nor does the team train for the many foreseeable problems that have occurred in other States.

In the face of this evidence, the courts below erred in upholding Kentucky's lethal injection procedures. In particular, both the Kentucky Supreme Court and the trial court erred in holding that it was irrelevant that the Commonwealth had alternative means readily available which would eliminate the risk of gratuitous and severe pain without compromising any valid penological interests. In view of the severity of the pain risked and the ease with which it could be avoided, Petitioners should not have been required to show a high likelihood that they would suffer such pain in order to make out an Eighth Amendment violation. In this regard, the Kentucky courts further erred in focusing myopically on the

probability that Petitioners themselves would suffer an agonizing death. The proper question is whether repeated executions using the three-drug formula and Kentucky's inadequate procedures would produce torturous deaths in at least some cases. The answer to that question is plainly yes.

Therefore, this Court should reverse.

ARGUMENT

I. The Eighth Amendment Prohibits Execution Procedures That Involve An Unnecessary Risk of Excruciating Pain.

This Court has long recognized that the "evil[] of most immediate concern to ... the [Eighth] Amendment," *Estelle v. Gamble*, 429 U.S. 97, 103 (1976), is the infliction of "unnecessary" pain in the course of carrying out a death sentence, *Kemmler*, 136 U.S. at 447. "By protecting even those convicted of heinous crimes, the Eighth Amendment reaffirms the duty of the government to respect the dignity of all persons." *Roper v. Simmons*, 543 U.S. 551, 560 (2005).

Although the methods of execution that most concerned the Framers involved mutilation and other barbarous practices, the Eighth Amendment was never "intended to ... prevent only an exact repetition of history." *Weems v. United States*, 217 U.S. 349, 373 (1910). Rather, "[t]he prohibition against 'cruel and unusual punishments, like other expansive language in the Constitution, must be interpreted according to its text, by considering history, tradition and precedent, and with due regard for its purpose and function in the constitutional

design. *Simmons*, 543 U.S. at 560. "To implement this framework," the Court has "established the propriety and affirmed the necessity of referring to 'evolving standards of decency that mark the progress of a maturing society'" to determine when punishments exceed constitutional limits. *Id.* at 560-61 (*quoting Trop v. Dulles*, 356 U.S. 86, 100-01 (1958) (plurality opinion)).

Advancements in science have made it possible to carry out a death sentence in a nearly painless manner. And the States that impose death sentences have, with near unanimity, adopted lethal injection in order to make executions painless to the condemned person. The Eighth Amendment's prohibition on the infliction of gratuitous pain would be meaningless, however, if it did not extend to methods of execution that, if performed properly, are humane and constitutional, but that are bound to inflict severe pain when insufficient care is taken to assure that they are indeed performed properly.

When a government chooses a method of execution that is highly vulnerable to multiple errors, any one of which will result in the infliction of agonizing pain, it incurs an Eighth Amendment obligation to provide adequate, practicable safeguards against those errors. This is the inescapable implication of the Amendment's command that the punishments adopted by American governments "must not involve the unnecessary and wanton infliction of pain." *Gregg*, 428 U.S. at 173 (plurality opinion). By choosing procedures that inevitably involve the infliction of gratuitous pain in some executions, they disregard the "principle of civilized treatment

guaranteed by the Eighth Amendment." *Trop v. Dulles*, 356 U.S. 86, 99 (1958) (plurality opinion). Therefore, a method of execution is administered unconstitutionally if the procedures in question impose a significant and unnecessary risk of severe pain that could be prevented by the adoption of reasonable safeguards or alternative procedures.

A. The Eighth Amendment Prohibits Punishments That Involve "Unnecessary Cruelty."

The Eighth Amendment requires the States, in carrying out death sentences, to avoid inflicting pain beyond what is necessary to cause death. This Court first considered the constitutionality of a method of execution in the late 19th century, and since then, it has consistently held that the Eighth Amendment prohibits punishments that involve unnecessary pain. In *Wilkerson v. Utah*, 99 U.S. 130, 135-36 (1878), the Court stated that "it is safe to affirm that punishments of torture, such as those mentioned by the commentator referred to, and all others in the same line of unnecessary cruelty, are forbidden by that amendment to the Constitution." The Court elaborated the prohibition in *In re Kemmler*, explaining that "[p]unishments are cruel when they involve torture or a lingering death .... [The Amendment] implies ... something inhuman and barbarous, something more than the mere extinguishment of life." 136 U.S. at 447; *see also Weems*, 217 U.S. at 409 (White, J., dissenting) ("that word [cruel] manifestly was intended to forbid the resort to barbarous and unnecessary methods of

bodily torture in executing even the penalty of death").

In more modern formulations, the Court has continued to rely on the concept of "unnecessary" pain, stating that "[t]he traditional humanity of modern Anglo-American law forbids the infliction of unnecessary pain in the execution of the death sentence." *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 463 (1947). In its most recent restatement, the Court explained that "the punishment must not involve the unnecessary and wanton infliction of pain." *Gregg*, 428 U.S. at 173 (plurality opinion) (citing *Weems* and *Wilkerson*).

Because the Eighth Amendment "is not fastened to the obsolete but may acquire meaning as public opinion becomes enlightened by a humane justice," *Weems*, 217 U.S. at 377, the prohibition on methods of execution that "involve the unnecessary and wanton infliction of pain" is not static in scope or fixed to specific practices. Rather, whether a method involves "unnecessary pain" must be determined in light of "the evolving standards of decency that mark the progress of a maturing society," *Simmons*, 543 U.S. at 561 (quotation marks omitted), as well as the means available to "extinguish[] life humanely," *Resweber*, 329 U.S. at 464 (plurality opinion). The *Gregg* Court explicitly noted the evolving nature of what constitutes "unnecessary pain," invoking Justice Powell's discussion in *Furman v. Georgia* of execution methods. *Gregg*, 428 U.S. at 171 (citing *Furman v. Georgia*, 408 U.S. 238, 429-430 (1972) (Powell, J., dissenting, joined by Burger, C.J., and Blackmun and Rehnquist, JJ.). In *Furman*, Justice

Powell, joined by three other Justices, reasoned that methods of execution that were "tolerate[d]" at the time of the founding would be enjoined as unconstitutional today, because "no court would approve any method of implementation of the death sentence found to involve unnecessary cruelty *in light of presently available alternatives*." 408 U.S. 238, 430 (1972) (Powell, J., dissenting) (emphasis added). Determining whether a method of execution involves unnecessary cruelty, in turn, "would call for a discriminating evaluation of [the] particular means" of execution, *id.*, in light of the amount of pain inflicted, whether civilized society could "tolerate" the imposition of such pain, and the ability to prevent that pain by adopting "presently available alternatives."

B. States Must Administer Their Execution Procedures In A Manner That Does Not Involve Unnecessary Pain.

A corollary to the prohibition of execution methods that involve unnecessary pain is that governments must carry out executions in a *manner* that avoids the needless infliction of pain. The guarantee of an execution free from unnecessary pain would be illusory if the Constitution permitted a theoretically humane method to be implemented in a manner that inflicted excruciating pain in practice. *Bethea v. Crouse*, 417 F.2d 504, 507-08 (10th Cir. 1969) (citing *Resweber* as standing for the proposition that "[c]ruel and unusual punishment may be inflicted by ... the inhumane execution of a permissible penalty").

This obligation applies equally when a government chooses a method of execution that is not inherently inhumane if it is performed properly, but that will involve severe pain if performed improperly. When a method of execution is administered in a flawed manner that creates a foreseeable danger of inflicting severe pain, that method, performed repeatedly over time, *will inflict* unnecessary pain on a subset of executed inmates. The foreseeable infliction of unnecessary pain on *some* condemned inmates cannot be any more tolerable under the Eighth Amendment than the infliction of unnecessary pain on *all* condemned inmates. Execution procedures that foreseeably inflict severe but preventable pain conflict with the essential values the Eighth Amendment seeks to preserve. Therefore, the Eighth Amendment obligates the government to carry out executions in a manner that avoids creating an unnecessary risk of pain with respect to individual inmates.

A plurality of this Court acknowledged this obligation in *Resweber*, stating that "we ... assume that the state officials carried out their [execution] duties ... *in a careful and humane manner*." 329 U.S. at 462 (emphasis added). To be sure, the Eighth Amendment does not require States to prevent accidents that occur even though prison officials acted with appropriate care – in other words, accidents "for which no man is to blame." *Id.* But it does require prison officials to act "in a careful and humane manner" to minimize foreseeable risks of severe pain. *Id.* Thus, as Justice Frankfurter suggested in his decisive concurrence in *Resweber*,

while an "innocent misadventure," *id.* at 470, did not render Francis's execution unconstitutional, "a hypothetical situation, which assumes a series of abortive attempts at electrocution ... would ... raise different questions." *Id.* at 471. A State's unjustified failure to minimize the danger of severe pain created by its execution procedures will foreseeably result in botched executions, thereby predictably inflicting suffering on the affected inmates. Such failure "involve[s] the unnecessary and wanton infliction of pain."[13] *Gregg*, 428 U.S. at 173 (plurality opinion)

C. Numerous Lower Courts Have Held That Unnecessary Risks Of Pain Are Unconstitutional.

Although this Court's precedents recognize that *how* an execution is carried out is constitutionally relevant, the Court has never had occasion to articulate the precise standard that governs such an analysis. The lower courts have grappled with these issues in light of the widespread evidence of maladministration of lethal injection. Many of these courts have interpreted *Gregg*'s prohibition on

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[13] Several federal and state courts have recognized the obligation to exercise proper care to ensure that executions are performed humanely. See, e.g., *Campbell v. Wood*, 18 F.3d 662, 687 & n.17 (9th Cir. 1994) (execution procedure constitutional because "risk [of pain] has been minimized as much as possible"); *Bethea v. Crouse*, 417 F.2d 504, 507-08 (10th Cir. 1969) (Constitution does not permit inhumane implementation of theoretically humane punishment); *Malicoat v. State*, 137 P.3d 1234, 1237 (Okla. Crim. App. 2006) (execution procedures constitutional if State takes "appropriate precautions and rel[ies] upon adequate training, skill, and care in doing the job").

punishments that "involve the unnecessary and wanton infliction of pain" to prohibit execution procedures that involve an "unnecessary risk" of pain.

For instance, in *Morales v. Tilton*, the district court framed the constitutional question as whether "California's lethal-injection protocol – as actually administered in practice – create[s] an undue and *unnecessary risk* that an inmate will suffer pain so extreme that it offends the Eighth Amendment." 465 F. Supp. 2d at 974 (emphasis added); *see also Cooper v. Rimmer*, 379 F.3d 1029, 1033 (9th Cir. 2004) (a plaintiff must show an "unnecessary risk of unconstitutional pain or suffering"). Applying this analysis, the district court found that California's procedures were unconstitutional because (1) the amount of pain involved if the procedures were implemented improperly would be "unconscionable"; (2) the procedures suffered from severe deficiencies that "resulted in an undue and unnecessary risk of an Eighth Amendment violation"; and (3) these risks would be preventable through the application of an "appropriate degree of care and professionalism." *Morales*, 465 F. Supp. 2d at 977, 974, 981-83.

Other courts have similarly held that plaintiffs can prevail by demonstrating that lethal injection procedures subject them to an unnecessary risk of severe pain. *See, e.g., Cooey v. Taft*, No. 2:04-CV-1156, 2007 WL 2607583, at *4 (S.D. Ohio Sept. 5, 2007) (stating that the "flaws" in the execution procedures that created an "unacceptable and unnecessary ... risk of violating the Eighth Amendment[] ... are readily fixable"); *Brown v. Beck*,

No. 06 CT 3018, 2006 WL 3914717, at *8 (E.D.N.C. Apr. 7, 2006); *Evans v. Saar*, 412 F. Supp. 2d 519, 524 (D. Md. 2006) ("A court must inquire whether an inmate facing execution has shown that he is subject to an unnecessary risk of unconstitutional pain or suffering") (internal quotation marks omitted); *see also LaGrand v. Stewart*, 173 F.3d 1144, 1148-49 (9th Cir. 1999). These courts have determined that the "unnecessary risk" standard provides a workable framework for evaluating the evidence of improper administration of execution procedures in light of the long-standing prohibition on the infliction of unnecessary pain.

D. The Eighth Amendment Requires States To Remedy Significant And Unnecessary Risks of Severe Pain.

The unnecessary risk analysis is a straightforward one that evaluates the risk in the context in which it arises. The analysis must include an assessment of (a) the severity of pain risked, (b) the likelihood of that pain occurring, and (c) the extent to which alternative means are feasible, either by modifying existing execution procedures or adopting alternative procedures. An execution procedure creates unnecessary risk where, taken as a whole, it presents a significant risk of causing severe pain that could be avoided through the use of a reasonably available alternative or safeguard.

The unnecessary risk standard is grounded in common sense – States should not be allowed needlessly to engage in practices that risk substantial and gratuitous pain – but it also flows

from the Eighth Amendment principles articulated in *Roper v. Simmons* and the other precedent discussed above. Today, nearly every State that carries out the death penalty requires an anesthetized death. *See supra* page 7 (noting that lethal injection is used in every State that has the death penalty save one). Electrocutions, hangings and gassings have all but disappeared in practice, and have been formally abolished in many States. *See supra* pages 2 to 4. Thus, there is today an undeniable "national consensus" that executions must be essentially painless. *Simmons*, 543 U.S. at 564. Not every State has lived up to this standard in practice. But the widespread adoption of lethal injection demonstrates that "contemporary standards of decency" require an anesthetized death. *Id.* at 562.

A lethal injection process that creates a significant and avoidable risk that an inmate will suffer severe pain is inconsistent with those contemporary standards of decency. Or put in the converse, contemporary standards of decency do not allow a State to ignore a significant and unnecessary risk that its chosen method of execution will cause severe pain.

The unnecessary risk standard requires a proper measure of care, but does not require a State to eliminate every risk, no matter how small and unpredictable. An insignificant and unforeseeable risk, particularly where the harm is minor and/or difficult to remedy, will not violate the Constitution. Thus, a "latent" problem with Louisiana's electrocution equipment, discernable only after the

switch was flipped, was the type of "unforeseeable accident" for which "no man is to blame," and did not violate the Eighth Amendment. *Resweber*, 329 U.S. at 460, 462, 464. That type of freak, unforeseeable occurrence does not represent an unnecessary risk for Eighth Amendment purposes.

Likewise, it should be plain that the unnecessary risk standard takes into account appropriate penological considerations. Most importantly, a legally cognizable risk is one that is reasonably avoidable. If a risk can be avoided only by taking extreme or unreasonable measures, then it will not fall in the category of an unnecessary risk. However, the greater the magnitude of pain, and the greater the likelihood of that pain, the greater the justification must be for not adopting safer alternative means. Where there is a significant risk of severe pain that could be avoided through alternative means, the penological grounds for failing to adopt an alternative must be compelling to find that the risk is necessary. In addition, where multiple acceptable alternatives exist to remedy a needlessly risky procedure, it is appropriate to seek input from the State as to which alternative can be most easily implemented. *See Morales*, 415 F. Supp. 2d at 1047 (offering California several choices in remedying its lethal injection protocol).

In sum, where a State has chosen to adopt procedures that create a significant risk of severe pain, the State is obligated to regulate its procedures so as to abate that risk.

II. Kentucky's Procedures Subject Inmates To An Unnecessary Risk Of Excruciating Pain.

A. The Kentucky Courts Failed To Apply The Proper Constitutional Test.

Although the unnecessary risk test derived from *Gregg* and its predecessors is a straightforward and commonsensical test, the Kentucky courts did not apply it. Instead, they erred in two important ways. First, they held that Eighth Amendment protects against only "substantial" risks rather than unnecessary ones. JA 759, 800. Second, they failed to consider the copious record evidence demonstrating the magnitude and nature of the risk imposed by Kentucky's lethal injection process, and the severity of the pain arising from that risk. JA 760-65.

1. The Kentucky Courts Applied The Wrong Standard.

The Kentucky Supreme Court's decision in this case cannot be squared with Eighth Amendment precedents, discussed above. Applying the "substantial risk" test, the courts below evaluated only the quantum of risk without consideration of the degree of pain at issue or the availability of alternatives. Indeed, the trial court held that the availability of less painful alternatives was irrelevant because Petitioners had not shown a substantial risk. In sharp contrast to the acontextual approach of the courts below, the unnecessary risk test looks at both the quantum of risk and the quantum of pain involved, as well as the availability of alternative methods to avoid the risk.

The higher the quantum of pain, and the more feasible the alternatives, the lower the degree of risk that can be tolerated as necessary (although that risk must always be at least significant, as described above). Thus, where the pain in question is severe and there is a reasonably available alternative, even a degree of risk that cannot be quantified as "substantial" will be an unnecessary risk.[14]

Moreover, the courts below were able to characterize the risk as insubstantial – and therefore constitutionally acceptable – only by myopically focusing on Petitioners' individual executions considered in isolation from the inevitable consequences of the repeated use of the protocol being used to execute them. The Kentucky courts failed to consider the degree to which even a risk that appears relatively small with respect to any individual execution would result in a number of botched and inhumane executions as the procedures are employed repeatedly over time to execute hundreds or thousands of condemned prisoners. Whether a risk of pain is constitutionally permissible must be considered in light of the extent to which unnecessary severe pain may be inflicted on inmates in the aggregate, such that the procedures "involve the unnecessary and wanton infliction of pain" over time. *Gregg*, 428 U.S. at 173 (plurality opinion). In failing to conduct this analysis, the courts below took an unduly cramped view of whether the risks created

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[14] Regardless, Petitioners' evidence, discussed below, demonstrated not just a significant but a substantial risk of pain. *See infra* pages 43 to 50.

by the Kentucky procedure are sufficient to be constitutionally cognizable.

2. The Kentucky Courts Failed To Analyze The Evidence As A Whole.

The Kentucky courts also fell short by failing to consider all of the evidence of the numerous deficiencies in Kentucky's procedures. The question whether a State's execution procedures create an unnecessary risk of pain requires consideration of the cumulative risk created by all of the individual deficiencies in the procedures. In other words, the question is not, as the Kentucky courts framed it, the degree of risk that an individual problem will occur – such as improper preparation of the drugs or an infiltrated IV – but the degree of risk of severe pain caused by the cumulative effect of all of the deficiencies, combined with the danger created by the use of personnel who are unequipped to prevent or correct these foreseeable problems. *Morales*, 465 F. Supp. 2d at 979-81. The lower courts failed to undertake this analysis, considering in isolation only two of the foreseeable problems that could arise due to deficiencies in Kentucky's procedures, and ignoring much of the evidence in the record regarding the numerous other failures in Kentucky's procedures.

B. This Court Should Find That Kentucky's Procedures Expose Inmates To An Unnecessary Risk Of Excruciating Pain.

The record evidence demonstrates that Kentucky's procedures create an unnecessary risk of excruciating pain. Both pancuronium and

potassium cause extreme suffering if administered without proper anesthesia; thus, Kentucky's procedure depends upon successful injection of thiopental. Yet the Commonwealth has set up a system with little margin for error, in which small but predictable missteps in administration will produce extreme suffering.

Rather than addressing the dangers created by the three-drug formula or determining whether less dangerous alternatives were available, Kentucky blindly adopted this method of execution and doggedly refuses to alter it despite mounting evidence of its risks. At the same time, the Commonwealth has created an administration system that, rather than minimizing the risks posed by the procedure, increases the danger of error through its needless complexity. And it has failed to use qualified personnel to carry it out.

The dangers inherent in Kentucky's procedure – dangers that are both well-known and well-documented – leave no doubt that, if not corrected, its method of execution will cause excruciating pain to some executed persons. These risks are both significant and unnecessary. Accordingly, Kentucky's lethal injection protocol and the methods adopted to administer it violate the Eighth Amendment.

1. Kentucky Has Chosen To Employ Dangerous Drugs That Involve A Risk of Excruciating Pain.

Kentucky has chosen to employ two drugs that together render the protocol extremely sensitive to

error, with even minor errors leading to catastrophic consequences. As discussed above, the injection of potassium into an individual who is not deeply anesthetized will cause excruciating pain. JA 443-44, 600, 626. In addition, a conscious individual given pancuronium would appear peaceful and relaxed, even while experiencing the terror and agony of conscious suffocation. *Id.* 417, 437, 624-26. In combination, the two drugs give rise to the danger that even if inmates are insufficiently anesthetized and consequently experience the pain of potassium, all evidence of that suffering will go completely unnoticed and uncorrected. *Id.* 441.

2. Kentucky Has Developed Drug Administration Procedures That Make Inadequate Anesthesia Likely.

Because pancuronium and potassium will inflict horrendous suffering on a person who is not properly anesthetized, Kentucky's lethal injection protocol depends on the successful administration of thiopental. Kentucky has exacerbated the danger inherent in its choice of drugs by relying on haphazard, convoluted procedures and employing unqualified personnel to implement them. Had the lower courts examined the record evidence of Kentucky's procedures as a whole, it would have been evident that the combination of needlessly complex procedures and unprepared personnel is a disaster waiting to happen.

Kentucky's method of preparing and injecting the drugs is complicated and prone to error at each step of the procedure. *First*, the DOC allows individuals

to prepare the thiopental dose even though they have no training or experience in doing so. *Id.* 528-29. Untrained personnel are likely to struggle to calculate and prepare the correct dose, resulting in substantial uncertainty as to whether an adequate dose was actually prepared. *Id.* 434, 532. This problem is exacerbated by the protocol's failure to set forth the desired volume and concentration of thiopental. *Id.* 472-73. Although the lower courts did not address this danger, other States' use of inadequately qualified personnel to prepare the thiopental has repeatedly resulted in incorrect, and potentially inadequate, doses of thiopental. *See, e.g., Morales*, 465 F. Supp. 2d at 980 (registered nurses' "admitted failure" to properly prepare thiopental created doubts as to "whether inmates ... have been sufficiently anesthetized"); *Taylor*, 2006 WL 1779035, at *5, *7 (expressing concern that the "physician who is solely responsible for correctly mixing the drugs" admitted confusion and inability to mix full dose of thiopental, in part because he had no anesthesia training).

Second, the DOC's procedures for IV insertion create a likelihood of problems, such as infiltration and improperly connected catheters. Although EMTs and phlebotomists are qualified to insert IVs, they are unequipped to do so for persons into whom peripheral IVs cannot be easily inserted. JA 517. It is often difficult to insert peripheral IVs in prisoners, because many have compromised veins from drug use. *Id.* 359, 772; *see also Beardslee*, 395 F.3d at 1074. These inmates foreseeably may require central line catheters, which would prevent the risks

of using compromised peripheral veins. *See* Trial Tr. 138-40, *Evans v. Saar*, 06-149 (D. Md. October 11, 2006) (testimony from Dr. Dershwitz that the inability to undertake central line insertion creates a significant risk of unreliable IV access). The DOC, however, has no plan for inserting central lines, and no execution personnel who would have the training to do so. JA 285, 463 476-78. Instead, DOC officials force execution personnel to attempt to place two IV catheters – a primary and a backup – for up to an hour. JA 975-76. Using a peripheral IV inserted after more than ten or fifteen minutes of unsuccessful attempts is dangerous because the IV is almost certain to be unreliable. *Id.* 475-76. The deficiencies in the DOC's IV procedures – regarding which the trial court made no findings – are particularly inexcusable in light of the fact that IV problems have led to prolonged inhumane lethal injection executions in other States. *See supra* pages 20 to 24.

Third, the Commonwealth has chosen to have its executioners administer the drugs from a separate room from which it is impossible to observe closely either the inmate or the catheter site. *Id.* 280. Execution personnel are thus extremely unlikely to detect any administration problems or signs of consciousness. Even though two DOC officials are present in the execution chamber itself, they do not know how to discern IV problems or verify the induction of general anesthesia. *Id.* 276, 340; *see also Harbison*, 2007 WL 2821230, at *17-*18 (crediting expert testimony that visual monitoring of catheter sites and inmates from a distance is

insufficient to detect IV problems, and only personnel with "daily experience" monitoring can do it effectively). Moreover, the drugs have to travel through many feet of IV line to reach the condemned inmate, and much of this line is not visible to the executioner pushing the drugs. JA 286-87. The only means of detecting IV problems would be to gauge the amount of resistance in the tubing, but the lay executioner does not have the training necessary to do so. JA 462-63. The potential for undetected IV problems is therefore significantly higher than if the drugs were administered from the bedside.

Fourth, the DOC's reliance on personnel with little or no training or experience administering intravenous drugs increases the likelihood of administration errors. The only execution team members who have even minimal medical training (EMTs and phlebotomists) do not have the qualifications or training to carry out most tasks involved in the protocol. *See supra* pages 17 to 18; *Harbison*, 2007 WL 2821230, at *14-*18. Inevitably, serious errors arise when uninformed and untrained personnel are relied upon to administer the execution procedure. *See, e.g.*, JA 508-09 (explaining that often it is "errors in judgment" that are "the major cause" of mistakes in administering drugs); *Morales*, 465 F. Supp. 2d at 979. Moreover, EMTs and phlebotomists do not have the training or experience to react to foreseeable problems. JA 529-30; *see also supra pages* 17 to 18. Nor does the DOC provide any training on reacting to contingencies. JA 191, 318.

Despite all this, the warden and deputy warden who oversee executions testified that they would rely on the EMT and phlebotomist to solve any problems that arise. *Id.* 283, 337-38. Their dependence is unavoidable because neither official has the knowledge needed to detect problems. *Id.* 283 (warden "honestly [doesn't] know what you'd look for" to discern signs of distress). The DOC's reliance on its medical personnel would be appropriate and useful if those personnel were adequately qualified. But the DOC never verified that these personnel were qualified or capable of discharging their responsibilities in the execution procedure. *Id.* 279 ("given the gravity of the situation," he "think[s]" the medical personnel would "know what to do"); *id.* 312 (IV team "probably" can mix drugs). Having failed to investigate the dangers of the procedure, DOC officials have no basis for assuming that execution personnel would "know what to do." This unthinking reliance on personnel who have minimal relevant training is a needless failure that has resulted in execution problems in other States. *See Taylor*, 2006 WL 1779035, at *7 (noting officials' deference to incompetent doctor).

In sum, the DOC's procedures create a setting in which botched executions are not only possible but highly likely. As described *supra*, pages 20 to 24, deficiencies that are similar to those present in Kentucky have led to botched executions in those States that perform executions more frequently than does Kentucky.

3. Kentucky's Selection Of These Risky Procedures Was Ill-Considered.

The deficiencies in Kentucky's procedures are the predictable result of the haphazard manner in which the DOC adopted them. The officials who developed and implemented the procedures and who currently supervise the process "did not conduct any independent scientific or medical studies or consult any medical professionals concerning the drugs and dosage amounts to be injected into the condemned." JA 760, 139-42; 225-27. Rather, they simply aped the three-drug formula used in other States without inquiring into the dangerousness of the procedures, or even understanding the drugs or the need to induce anesthesia. *Id.* 760.

Similarly, DOC officials made decisions that require medical expertise – such as the dose of thiopental and the manner in which the IV will be inserted – without consulting any medically trained personnel. *Id.* 255-56, 289, 760-61. It is unsurprising that the results of the officials' uninformed decisionmaking process include the extremely dangerous neck catheterization disapproved by the DOC's own medical staff and found unconstitutional by the trial court, *id.* 762, 767; the ill-advised requirement that personnel will attempt to insert the IV line for an hour; and the convoluted process for remote delivery of the drugs. *Id.* 256, 286, 288-89, 359, 639, 976.

C. The Risk Kentucky's Procedures Create Is Reasonably Preventable Through The Adoption Of Available Alternatives.

The foreseeable risk that Kentucky's execution procedures will result in excruciating pain is an unnecessary risk, and therefore unconstitutional. The risk could be reasonably minimized by changing either the three-drug formula itself or the process of administering the drugs.

1. Removing Pancuronium And Potassium From The Execution Protocol Would Greatly Reduce The Risk Of Pain Without Compromising Penological Interests.

By omitting pancuronium and potassium and relying instead on a lethal dose of an anesthetic, the DOC would virtually eliminate the risk of pain. These facts were undisputed below, leading the trial court to note that "evidence was presented that other drugs were available" that would lessen the danger of severe pain. *Id.* 766. Moroever, there is no evidence that removing pancuronium and potassium from the protocol would compromise any legitimate penological interests.

It is undisputed that pancuronium is not a necessary component of the execution procedure. The drug is not given in order to cause the inmate's death, *id.* 443-44, 585, and it does not further the humaneness of the execution, *id.* 445. The Commonwealth presented no legitimate rationale for using pancuronium. As the trial court found, the Commonwealth's justification is aesthetic:

Pancuronium conceals "muscular movements in the condemned, involuntary or otherwise, that may result from the subsequent injection of [p]otassium." JA 763; *see Beardslee*, 395 F.3d at 1075-76 & n.13 (stating that the State's failure to "provide a single justification for the use of pancuronium," and Dr. Dershwitz's assertion of an aesthetic rationale for pancuronium, are, "to say the least, troubling"). Dr. Dershwitz asserted that the involuntary muscle movements sometimes caused by potassium "could be perceived by lay witnesses as suffering or discomfort." JA 559-61. The trial court therefore concluded that the "use of [p]ancuronium ... in Kentucky's lethal injection protocol serves no therapeutic purpose." *Id.* 763.

The Commonwealth's rationale for using pancuronium – whether couched as concern for the witnesses, or for the "dignity" of the inmate, *id.* 739-40 – is not legitimate. Pancuronium's inclusion in the protocol virtually guarantees that prison personnel will be unable to detect any problems that are likely to occur, leaving the inmate to endure conscious suffocation and pain unbeknownst to observers. *Id.* 377, 441. Yet the DOC presented no evidence of any concrete harm that would justify imposing such a risk on condemned inmates. There is no evidence and no reason to think that witnesses would be injured by viewing any involuntary movements associated with death. Witnesses to electrocutions and gassings routinely observed seizures and other bodily movements. *See supra* pages 2 to 4. And one State, New Jersey, has determined that pancuronium is unnecessary, and

has opted to use only thiopental and potassium in its protocol. JA 109-10. In any event, the concern that witnesses may mistake unconscious movements for evidence of pain could be eliminated by informing them about the nature of the movements they might see. Thus, the danger to the inmate created by pancuronium could be avoided at little cost to the DOC.[15]

It was also undisputed that if potassium were removed from the protocol, the three-gram dose of thiopental would independently cause death. *Id.* 547. Thus, potassium too is unnecessary.

The Commonwealth presented no justification for its use of potassium apart from Dr. Dershwitz's suggestion that the speed with which potassium stops the heart is a positive attribute. *Id.* 627. But speed for its own sake is not a penological interest. The Commonwealth has not explained how its penological interests would be compromised if a few

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[15] The medical and veterinary communities have determined that it is never acceptable to administer a paralytic simply to protect the sensibilities of observers. The increased risk to the patient – even when trained veterinarians or physicians are present – cannot be justified by concerns that pet owners or family members may be upset by involuntary movements. JA 456-57; *see* Concannon Br., *supra*, *Hill v. McDonough*, No. 05-8794, at 14-16 (S. Ct. 2006). *See, e.g.*, Robert D. Truog et al., *Recommendations for end-of-life care in the intensive care unit: The Ethics Committee of the Society of Critical Care Medicine*, 29 Crit. Care Med. 2332, 2345 (2001) (use of paralytic for aesthetic purposes cannot "plausibly" be said to be for the benefit of the patient; "the best way to relieve [family's] suffering [from seeing death movements] is by reassuring them of the patient's comfort through the use of adequate sedation and analgesia").

minutes were added to the duration of executions.[16] Among the jurisdictions that employ the three-drug formula, the average duration of executions varies widely, from two or three minutes to over twenty minutes. *See, e.g.*, JA 496 (Kentucky execution of Eddie Harper took approximately five minutes); *Walker v. Johnson*, 448 F. Supp. 2d 719, 721 (E.D. Va. 2006); *Morales v. Hickman*, 415 F. Supp. 2d at 1044-46 & n.16. Clearly, then, penological interests do not require that otherwise painless executions be completed in less than two minutes.

The "speed" justification for potassium appears even more flimsy in view of the fact that Dr. Dershwitz admitted, and Petitioners' experts agreed, that there are other cardiotoxic drugs that will stop the heart, *without causing pain*, "within a few minutes." JA 628. The DOC's failure to investigate, and refusal to consider these alternative drugs is inexplicable.

Although the Kentucky courts never addressed the viability of a barbiturate-only protocol, several other courts confronting lethal injection challenges have concluded that such a protocol would virtually eliminate the risk of pain. For instance, the district court, in *Morales v. Tilton* suggested that the State consider a barbiturate-only protocol, reasoning that

> because the constitutional issues presented by this case stem solely from

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[16] A DOC physician and the Commonwealth's chief toxicologist testified that a three-gram dose of thiopental would cause death within three minutes to fifteen minutes. Tr. 656:16-18; *id.* 553:21-24.

> the effects of pancuronium bromide and potassium chloride on a person who has not been properly anesthetized, removal of these drugs from the lethal-injection protocol, with the execution accomplished solely by an anesthetic, such as sodium pentobarbital, would eliminate any constitutional concerns, subject only to the implementation of adequate, verifiable procedures to ensure that the inmate actually receives a fatal dose of the anesthetic.

465 F. Supp. 2d at 983; 415 F. Supp. 2d at 1047 & n.16 (providing State with option of executing plaintiff by means of "thiopental or another barbiturate or combination of barbiturates"); *see also, e.g., Harbison*, 2007 WL 2821230, at *22-*23 (stating that barbiturate-only protocol "would have greatly mitigated the plaintiff's risk of pain"); *Brown*, 2006 WL 3914717, at *2, *4 (discussing plaintiff's request that North Carolina use a barbiturate protocol, and the *Morales* Court's consideration of barbiturate-only protocol).

These courts' opinions were informed by the very expert input that should have attended the development of the first lethal injection protocols in Kentucky and other States. *See, e.g., Morales*, 415 F. Supp. 2d at 1047 & n.16 (relying on testimony of both sides' expert anesthesiologists regarding the relative risks of the barbiturate-only and three-drug protocols). Dr. Dershwitz, who defended Kentucky's three-drug protocol in this case and now advises many jurisdictions regarding their execution

protocols, has recently begun recommending that jurisdictions adopt a barbiturate-only protocol. In Tennessee, for instance, the *Harbison* Court found that "Dr. Dershwitz recommended that the committee adopt a one-drug protocol which provided for the administration of 5 grams of sodium thiopental, ... and a waiting period of five minutes before the physician came in and confirmed death. Then, if the inmate were still alive, a second 5 gram dose of sodium thiopental could be administered." *Harbison*, 2007 WL 2821230, at *3 (internal quotation marks omitted).

Moreover, the record in *Harbison* indicates that no substantial penological interests preclude the use of the barbiturate-only protocol. According to the Tennessee DOC, the advantages of a barbiturate-only execution are that "[a]ll physicians have agreed [there is] less chance of error"; it is simple; it is "[p]eaceful to witnesses"; it is "[s]imilar to animal euthanasia"; it "[e]liminates Pavulon & Potassium Chloride." *Id.* at *3-*4. The only pragmatic disadvantage listed by the DOC was its belief that the protocol might involve a "potential longer time to pronounce death" in States that rely on EKG readings to pronounce death. *Id.* at *4. The DOC's protocol revision committee was apparently not deterred by this possibility as it recommended that the State adopt the barbiturate-only protocol on the strength of Dershwitz's advice that inmates would die within five minutes of the administration of an overdose of thiopental. *Id.* at *22-*23 (State rejected recommendation because of "political ramifications,"

though it was willing to adopt the barbiturate-only protocol if ordered to do so).

In sum, it is evident that a barbiturate-only protocol is a reasonably available alternative procedure that would address the significant risks created by Kentucky's use of pancuronium and potassium and its failure to ensure that the thiopental will be successfully administered. Kentucky has suggested no justification that would counsel against adopting the barbiturate-only protocol, and other States have all but admitted that doing so would not compromise any legitimate penological interests.

2. An Alternative Way To Minimize Risk Is For A Qualified Person To Monitor Anesthetic Depth Throughout The Execution.

If Kentucky insists on continuing to use pancuronium and potassium, then an alternative means of reducing unnecessary risk would be to ensure that the inmate is sufficiently anesthetized throughout the execution by monitoring anesthetic depth.

As Dr. Heath testified at trial, unconsciousness is a matter of degree. JA 406-07. Thus, the monitoring of "anesthetic depth" by qualified personnel is critical to ensuring that an inmate is sufficiently unconscious so as not to feel the agony and extreme pain that would necessarily otherwise result from the administration of pancuronium and potassium. *Id.* 418-22. The need for monitoring is even more critical when a paralytic such as pancuronium is

given, because an inmate would be unable to speak, move or otherwise signal pain. *Id.* (discussing subtle signs trained personnel would look for to assess consciousness in a paralyzed person). Unrebutted trial testimony established that monitoring by personnel trained in detecting consciousness would be necessary to remove this risk of the three-drug protocol, at least in the absence of systemic changes to the DOC's execution personnel and drug administration system. These personnel, using whatever monitoring equipment they deem necessary (such as a BIS monitor, blood pressure cuff, EKG, and/or EEG, *id.* 420-22, 439-40), could reasonably ensure that the execution procedures do not result in excruciating pain. It was also uncontested that Kentucky uses no equipment to monitor for anesthetic depth, *id.* 764, and does not have any personnel even attempt to verify unconsciousness other than the ineffectual check by the Warden described above.[17]

Other courts have recognized the importance of monitoring anesthetic depth and offered States the choice between adopting a one-drug protocol or using three drugs in conjunction with monitoring. *Morales*, 415 F. Supp. 2d at 1047 (requiring California to either conduct executions using a "single" barbiturate, or use a "qualified individual [to verify that the inmate] is in fact unconscious"); *see also Morales v. Hickman*, 438 F.3d 926, 931 (9th Cir. 2006), *cert. denied*, 546 U.S. 1163 (2006) (monitoring

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[17] The DOC's existing execution personnel have no anesthesia training and therefore would be unable to monitor anesthetic depth effectively. JA 404, 529.

by anesthesia professional who could take "all medically appropriate steps ... to immediately place or return Morales into an unconscious state" would "alleviate substantial concerns").

D. Conclusion.

The risks created by the use of pancuronium and potassium are not justifiable in light of any penological interests. Those interests, to the extent they are legitimate, can be furthered through means that do not subject inmates to a danger of excruciating pain. Moreover, there are reasonably available alternatives that do not involve the same risk of unnecessary pain and could be adopted without compromising penological interests. Thus, Kentucky's execution procedures involve an unnecessary risk of excruciating pain and agony and are therefore unconstitutional.

III. In The Alternative, This Court Should Remand To Allow The Lower Courts To Undertake The Proper Constitutional Analysis.

The record in this case establishes that Kentucky's procedures create a significant and unnecessary risk of severe pain and agony, such that this Court should reverse the Kentucky Supreme Court's judgment. At a minimum, Petitioners are entitled to a remand with directions to the lower courts to evaluate the evidence in a proper manner under the correct Eighth Amendment standard. As discussed above, the lower courts looked only at the quantum of risk, and they committed two additional analytical errors in applying the erroneous "substantial risk"

standard. They considered only a portion of the evidence of administration deficiencies in the record, and they assessed the degree of risk involved in Kentucky's procedures from the standpoint of each individual execution rather than considering the probability that repeated executions using those procedures would produce at least some torturous deaths. The Kentucky courts also failed to consider whether the risk of pain was unnecessary in view of Petitioners' showing that reasonably available alternative procedures would minimize the risks created by the DOC's deficient procedures.

Because the record was created and adjudicated in light of an erroneous standard, the lower courts should be required to reevaluate it under the correct "unnecessary risk" standard and to assess the risk in a proper fashion on consideration of all of the relevant facts. *See, e.g., Panetti v. Quarterman*, 127 S. Ct. 2842, 2863 (2007) (because "the record was developed pursuant to a standard we have found to be improper," "[t]he underpinnings of petitioner's claims should be explained and evaluated in further detail on remand."); *Johnson v. California*, 543 U.S. 499, 515 (2005) (noting that a "remand the case to allow the Court of Appeals for the Ninth Circuit, or the District Court, to apply [the legal standard] in the first instance" is routine where the lower courts have applied an incorrect legal standard).

CONCLUSION

For the foregoing reasons, this Court should reverse, or alternatively, should remand for further proceedings.

Respectfully submitted,

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Petitioners,

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JOHN D. REES, ET AL.,

Respondents.

ON WRIT OF CERTIORARI TO THE SUPREME COURT OF KENTUCKY

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QUESTIONS PRESENTED

I. Does the Eighth Amendment to the United States Constitution prohibit means for carrying out a method of execution that create an unnecessary risk of pain and suffering as opposed to only a substantial risk of the wanton infliction of pain?

II. Do the means for carrying out an execution cause an unnecessary risk of pain and suffering in violation of the Eighth Amendment upon a showing that readily available alternatives that [allegedly] pose less risk of pain and suffering could be used?

III. Does the continued use of thiopental, pancuronium, and potassium, individually or together, violate the cruel and unusual punishment clause of the Eighth Amendment because lethal injections can be carried out by using other chemicals that [allegedly] pose less risk of pain and suffering?

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STATEMENT

A. Introduction

This case arises out of two sets of grisly murders for which the Commonwealth of Kentucky has imposed the penalty of death. On January 30, 1992, petitioner Ralph Baze ambushed and murdered Sheriff Steve Bennett and Deputy Sheriff Arthur Briscoe of Powell County, Kentucky, when the officers attempted to serve several Ohio felony warrants on Baze. Baze shot Sheriff Bennett three times in the back with an SKS semi-automatic assault rifle, killing him. Deputy Briscoe returned fire with a pistol until he ran out of ammunition. Briscoe was attempting to run for cover when Baze shot him twice in the back with the assault rifle. As Deputy Briscoe lay face down and bleeding, Baze punched him with the muzzle of the rifle, then executed him with a shot to the back of the head from point-blank range. Baze was convicted by a jury of both murders and sentenced to death. *See Baze v. Commonwealth*, 965 S.W.2d 817, 819-20 (Ky. 1997).

On April 9, 1990, petitioner Thomas Bowling shot and killed Eddie and Tina Earley, and wounded the Earleys' two-year-old son, as the victims sat inside their automobile in the parking lot of a dry cleaning business in Lexington, Kentucky. Bowling's automobile had crashed into the driver's side of the Earleys' vehicle. After the impact, Bowling got out of his automobile, shot the victims, then returned to his vehicle and fled from the scene. Bowling was convicted by a jury and sentenced to death for the

murders of Eddie and Tina Earley. *See Bowling v. Commonwealth.*, 873 S.W.2d 175, 176-77 (Ky. 1994).

Petitioners Baze and Bowling have exhausted all of their appeals. In the proceedings below, petitioners sought to have their executions halted by challenging Kentucky's method of execution under the Eighth Amendment of the United States Constitution. Specifically, petitioners contended that the lethal injection protocol employed by Kentucky constitutes cruel and unusual punishment. After conducting a bench trial featuring the testimony of 20 witnesses, the trial judge rejected petitioners' Eighth Amendment challenge in an opinion that contained detailed findings of fact and conclusions of law. The Kentucky Supreme Court, in a unanimous opinion, upheld the protocol as constitutional. The decision below is correct and should be affirmed.

B. Procedural History of this Case

On August 9, 2004, Baze and Bowling, both inmates under death sentences for murder convictions, filed a civil suit in Franklin Circuit Court naming as defendants Kentucky Department of Corrections ("KDOC" or "DOC") Commissioner John Rees, Kentucky State Penitentiary Warden Glenn Haeberlin, and Governor Ernie Fletcher. JA9.[1] The sole issue was whether the manner in which the Commonwealth of Kentucky carries out death sentences is constitutionally sound. This case

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[1] Commissioner Rees and Governor Fletcher are respondents in this Court. Warden Haeberlin was an appellee below but has since been replaced by Thomas Simpson, who is thus also a respondent here. See S. Ct. Rule 35.3.

did not address issues involving petitioners' guilt or their convictions at trial. Moreover, petitioners did not question their recommended death sentences or maintain that the death penalty itself violates the Eighth Amendment.

Franklin Circuit Court Judge Roger Crittenden conducted a bench trial featuring the testimony of 20 witnesses, including various DOC personnel, physicians, issue advocates, and researchers. JA800. The extensive evidence presented at trial, which is described below, covered a wide range of subjects, including the origins and development of Kentucky's protocol for lethal injection, the pharmacological effects of the three drugs used in that protocol, the procedures and safeguards employed in administering the drugs, and the Commonwealth's experience with implementing that protocol.

Following an "extensive bench trial" (JA802), Judge Crittenden issued his Findings of Fact and Conclusions of Law, holding that petitioners had failed to carry their burden of proving by a preponderance of evidence that Kentucky's lethal injection protocol violates the prohibitions against cruel and unusual punishment under the Eighth Amendment to the U.S. Constitution and Section 17 of the Kentucky Constitution. JA754-769.

Baze and Bowling appealed. The Kentucky Supreme Court unanimously affirmed. JA798-809.

C. The History of Lethal Injection in Kentucky

In 1998, the General Assembly of the Commonwealth of Kentucky passed Kentucky Revised Statute § 431.220, which adopted lethal injection as the primary method of execution. To date, Kentucky is one of 37 states that have adopted lethal injection as the primary or sole method of execution, in addition to the federal government and the United States military. *Stanford v. Kentucky*, 492 U.S. 361, 362 (1989), *abrogated by Roper v. Simmons*, 543 U.S. 551 (2005).

In contrast to the lethal injection statutes in 14 other lethal injection states,[2] Kentucky Revised Statute § 431.220(1) does not specify the drugs or categories of drugs that must be used during a lethal injection or the protocol to be followed in administering the drugs used. Kentucky is one of only two states that expressly prohibit the participation of physicians in executions.[3]

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[2] Those states are: Arkansas, A.C.A. § 5-4-617; Idaho, I.C. § 19-2716; Illinois, 725 ILCS 5/119-5; Maryland, MD Code, Correctional Services, § 3-905; Mississippi, Miss. Code Ann. § 99-19-51; Montana, MCA 46-19-103; New Hampshire, N.H. Rev. Stat. § 630:5; New Jersey, N.J.S.A. 2C:49-2; New Mexico, N.M.S.A. 1978, § 31-14-11; North Carolina, N.C.G.S.A. § 15-188; Oklahoma, 22 Okl. St. Ann. § 1014; Oregon, O.R.S. § 137.473; Pennsylvania, 61 P.S. § 3004; and Wyoming, W.S. 1977 § 7-13-904.

[3] *See* Kentucky Revised Statute § 431.220(3) ("No physician shall be involved in the conduct of an execution except to certify the cause of death provided the condemned is declared dead by

Like the lethal injection statutes in eight other states,[4] Kentucky Revised Statute § 431.220(1) allows inmates (such as petitioners) who were sentenced before lethal injection was adopted as the primary method of execution the option to elect to be executed under the method in place before the adoption of lethal injection. JA804.[5] In addition, Kentucky is one of 13 states with statutes that provide for the method of execution to automatically revert to electrocution or some other method of execution in the event that lethal injection is found to be unconstitutional. *See* Kentucky Revised Statute § 431.223.[6]

Shortly after the adoption of the 1998 amendments to Kentucky Revised Statute § 431.220,

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another person."). Illinois is the other state. *See* 725 ILCS5/119-5.

[4] *See* Alabama, Ala. Code 1975 § 15-18-82; Arizona (pre-11/23/92 offenses), A.R.S. § 13-704; California, Cal. Penal Code § 3604; Florida, F.S.A. § 922.105; South Carolina, Code 1976 § 24-3-530; South Dakota (pre-7/1/07 convictions or sentences), SDCL § 23A-27A-32.1; Virginia, Va. Code Ann. § 53.1-234; Washington, RCWA 10.95.180.

[5] Electrocution was the method of execution in place in Kentucky before March 31, 1998. Both petitioners were sentenced to death before March 31, 1998; each has pleaded that he refuses to elect electrocution as his method of execution, thus leaving lethal injection as the method of execution by default.

[6] *See also* Alabama, Ala. Code 1975 § 15-18-82.1; Arkansas, A.C.A. § 5-4-617; California, Ann. Cal. Penal Code § 3604; Delaware, 11 Del. C. § 4209; Florida, F.S.A. § 922.105; Illinois, 725 ILCS 5/119-5; Ohio, R.C. § 2949.22; Oklahoma, 22 Okl. St. Ann. § 1014; South Carolina, Code 1976 § 24-3-530; Tennessee, T.C.A. § 40-23-114; Utah, U.C.A. 1953 § 77-18-5.5; Wyoming, W.S. 1977 § 7-13-904.

in compliance with the amended statute, KDOC officials began the process of developing a lethal injection protocol by gathering information from and visiting other states, including Indiana, Virginia, Georgia, and Alabama. JA154-157, 221-223. After obtaining information from those states, and drawing on their own professional experience, KDOC officials made numerous changes and the protocol was reviewed by the highest levels of state government. JA153-159, 227.

D. The Execution of Eddie Lee Harper

On May 25, 1999, Eddie Lee Harper became the first and only inmate to date to be executed under Kentucky's lethal injection protocol. According to KDOC personnel present at the execution, Harper went to sleep within 15 seconds to one minute from the moment the Warden commenced the execution, and never moved or exhibited any pain whatsoever after losing consciousness. JA148, 189, 277-278. According to testimony from medical professionals at the trial, the signs, or lack thereof, were exactly what should have happened in a proper execution. There were no visible signs of infiltration, where the needle is not properly inserted into the condemned inmate's vein, according to Kentucky's State Medical Examiner, Dr. Tracey Corey, who performed the autopsy. Dr. Corey also testified that the evidence showed the injected drugs circulated throughout Harper's body. JA230. Even petitioners' expert, Dr. Mark Heath, after reviewing all the medical evidence surrounding Harper's execution, did not find anything out of the ordinary regarding the execution. JA502.

Petitioners imply that the record contains evidence indicating Harper felt pain during the administration of the pancuronium and the potassium. Yet petitioners fail to acknowledge, as their own expert did, that after the administration of the thiopental Harper would have been unconscious, would have therefore been unaware of the administration of the pancuronium and the potassium, and was thereby afforded a painless death. JA496-497. Even Professor Deborah Denno, a Fordham law professor who testified as an expert for petitioners, determined that the execution of Harper showed no signs of problems. JA134.

E. The Three-Drug Formula in Kentucky

1. Thiopental

The Commonwealth's expert, Dr. Mark Dershwitz, testified that the drug combination and amounts used in Kentucky's lethal injection protocol would ensure a humane death. JA566. Dr. Dershwitz is an expert in pharmacokinetics, which measures the time course of drugs in a human being. JA544-545. Dr. Heath, petitioners' expert, acknowledged that Dr. Dershwitz has more expertise in that field and would defer to him. JA484-485. Dr. Dershwitz testified that, when properly delivered, thiopental would render an individual unconscious for hours. JA557. Dr. Heath agreed. JA499. Dr. Dershwitz testified that, even though thiopental is not used frequently in hospitals today, it is a very reliable drug. JA555. Dr. Heath agreed. JA482. Dr. Dershwitz testified that a painless and humane death would result if the three grams used in

Kentucky are properly delivered to an individual. JA558-559. Dr. Heath agreed. JA494. While petitioners go to great lengths to refer to thiopental as an "ultra-short-acting" barbiturate to give the impression it will wear off quickly, Dr. Heath could not escape that fact that, when given in a three-gram dose, thiopental would render someone unconscious for hours. JA499.[7]

Petitioners also claim that one of the dangers of using thiopental is that it must be mixed or reconstituted. Thiopental is purchased in 500-milligram doses. The fluid and powder are already measured and come together when purchased. JA844. Reconstituting the drug is accomplished by drawing the fluid into a syringe and injecting it into the powder and shaking. JA526-527. Dr. Scott Haas, Medical Director for KDOC, equated the task of reconstituting the drug with mixing Kool Aid. 5 Tr. 695. To prepare the three-gram dose, or 3000 milligrams, an individual simply combines six pre-measured containers. JA844, 847. However, petitioners argue that this is an extremely difficult process that should be performed only by medical doctors.

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[7] Dr. Dershwitz testified that the description of thiopental as a "short acting barbiturate" is relative to other barbiturates. JA557-558. When a dose of three grams is used, Dr. Haas testified, the characteristics of the drug change from that of an ultra short acting barbiturate to a rapid on-set, long-acting barbiturate. JA378-381, 383. Dr. Dershwitz further testified that propofol, the barbiturate petitioners now argue should be substituted for thiopental, is actually a shorter-acting barbiturate than thiopental. JA555.

2. Pancuronium

Petitioners argue that pancuronium has no purpose when used in an execution. However, Dr. William Watson, an expert for petitioners, testified that in executing someone, pancuronium would have a use in stopping breathing. 7 Tr. 956, 967. Other medical testimony showed that pancuronium would decrease respiration in the condemned inmate. JA559. Also, pancuronium assures that involuntary muscle reactions will not cause an intravenous ("IV") line to dislodge, therefore decreasing the possibility of the chemicals not being properly introduced into the condemned. JA523. Moreover, the use of pancuronium eliminates convulsions and thus provides a dignified death to the inmate and witnesses to the execution. JA561. Petitioners further ignore the testimony of all medical experts that agreed that thiopental would eliminate any of the pain that petitioners frequently discuss in their argument. JA558-559.

In connection with evidence relating to pancuronium, the trial court received testimony discussing "conscious awareness." Petitioners offered the testimony of Carol Weihrer, who experienced pain during a surgery after being inadequately anesthetized and receiving a paralytic drug. JA392-395. But petitioners fail to acknowledge that Weihrer received a *therapeutic* dose of a drug similar to thiopental – a dose *ten times less* than would be administered during an execution. JA548. Dr. Heath testified that, in surgical settings when patients are given a therapeutic dose, conscious awareness is estimated to take place in

only 1 out of every 500 surgeries. JA413-414. Dr. Dershwitz confirmed this estimate and further testified that he is not aware of any reported case of conscious awareness when an individual received a three-gram dose of thiopental to place someone into a medically induced coma. JA557-558, 630.

3. Potassium

Petitioners repeatedly characterize potassium being administered into a conscious person as agonizing, once again ignoring the testimony that, when given thiopental first, a condemned inmate would experience a humane death. JA494, 558-559. The amount of potassium given in Kentucky ensures an immediate and certain death. JA452, 455. In Kentucky's execution of Eddie Lee Harper, Dr. Heath testified, Harper died within one minute of potassium being administered. *Id.* No testimony presented by petitioners suggested an alternative that would be as fast-acting and effective as potassium. Throughout their argument, petitioners discuss each drug individually and its effects instead of recognizing that the Kentucky protocol is made of up a three-drug combination.[8]

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[8] To date, 28 states for which information is available as well as the United States Bureau of Prisons use both pancuronium and potassium in their lethal injection protocol. Deborah W. Denno, *When Legislatures Delegate Death: The Troubling Paradox Behind State Use of Electrocution and Lethal Injection and What It Says About Us*, 63 Ohio St. L.J. 63, 146 (2002).

F. Alternatives to the Chemicals Used in Kentucky

Dr. Heath and the other witnesses called by petitioners at trial offered no other testimony regarding the availability of alternative chemicals posing less risk than the ones now used in Kentucky and other jurisdictions. Professor Denno testified that "[i]n my research, I found no studies or investigation on whether or not any other kind of chemicals could be used in the course of a lethal injection execution." JA106. Watson testified that "[t]here is nothing that I'm aware of that has been published" regarding national studies on any alternative drugs for use in lethal injection. 9 Tr. 1176. The testimony by all medical experts during the trial confirmed that the three chemicals used in the Kentucky protocol are very useful and effective drugs even today. JA351-352, 381-382, 482.

Respondents did consult about improvements to the state's protocol with KDOC Medical Director Dr. Scott Haas, who provided them with additional information about the properties of thiopental and the effect of an increase in dosage from two grams to three grams. As Dr. Haas testified at trial, he was asked for "general information about the drugs that are utilized in the execution protocol" as well as for "clinical information how the drugs work, what it is that they actually do when given. JA362. Dr. Haas was also asked about the amount of thiopental to be used for the initial stage of the execution. *Id.*

G. Kentucky's Voluntary Efforts to Improve The Safeguards in its Protocol

KDOC has repeatedly demonstrated its willingness to modify its protocol when doing so would promote the safe, responsible and humane implementation of the death penalty without creating new risks or unduly constraining KDOC's ability to carry out lawful death sentences. For example, KDOC elected to increase the dose of thiopental from two to three grams when discussions with physicians established that the change would further reduce the remote risk of consciousness. JA361-362, 382-383.[9] These modifications were made without prompting from any court. In its opinion below, the trial court commended KDOC for its unilateral actions to improve the protocol. JA768.

Kentucky has also added sections to its lethal injection protocol addressing the qualifications and training of execution team members. JA984. Kentucky's current protocol employs certified phlebotomists and emergency medical technicians ("EMTs") to perform the necessary venipunctures to administer the drugs. *Id.* According to the protocol, these medical professionals are afforded one hour to find suitable IV sites to insert the IV catheters into the arm, hand, leg, or foot of the inmate. JA976. Originally, the protocol didn't limit the possibility for

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[9] Kentucky's original protocol called for the injection of the following sequence of drugs: thiopental (2 gm), a short-acting barbiturate; saline (25 ml); pancuronium (50 mg), a muscular paralytic agent; saline (25 ml); and potassium (240 meq), which disrupts the signal for necessary heart function. JA858.

a cut-down procedure in the event that a suitable site could not be found, but KDOC has removed the cut-down procedure. *Id.* As it stands now, if the IV team cannot locate a suitable site within one hour, KDOC's General Counsel is informed that the team cannot locate a site. The General Counsel then informs Commissioner Rees, who in turn contacts the Governor to request a new execution date. JA975-976.[10]

H. The Decisions of the Kentucky Courts

After a seven-day bench trial in which the trial court received the testimony of 20 witnesses and carefully weighed the parties' arguments and post-trial briefs, the court upheld the constitutionality of Kentucky's method of lethal injection. JA754-769. The trial court concluded that petitioners had failed to carry their burden of demonstrating, by a preponderance of the evidence, that Kentucky's lethal injection protocol "creates a substantial risk of wanton and unnecessary infliction of pain, torture, or lingering death." JA759 (citing *Gregg v. Georgia*, 428 U.S. 153, 171 (1976) (joint opinion)).

The court's decision rested on a number of findings of fact. *See* JA760-765. With respect to the risks supposedly associated with Kentucky's lethal injection protocol, the court found, among other things, that:

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[10] Kentucky's protocol uses an electrocardiogram ("EKG") to verify the cessation of heart activity, and a doctor and coroner are then brought in to confirm the death of the condemned inmate. JA976, 979-981.

- there "would be minimal risk of improper mixing" of the thiopental "[i]f the manufacturers' instructions are followed" (thus rejecting testimony presented by petitioners that "a layperson would have difficulty performing this task");

- there is only "a minimal risk that a precipitate will form" due to a reaction between the thiopental and pancuronium because the protocol "contains the procedural safeguard of flushing the I.V. line with a saline solution after the administration of each drug";

- three grams of Sodium Thiopental, "when properly administered, will render a person unconscious within one (1) minute of injection"; and

- the protocol "employs certified phlebotomists and emergency medical technicians . . . to perform the necessary venipunctures" and allows them a one-hour "window" in which to correctly insert the IV catheter, a window that "is not excessive but rather necessary."

JA761-763. With respect to the changes petitioners claimed Kentucky should make to its protocol, the trial court expressly found that the use of a Bispectral Index ("BIS") monitor "to monitor for consciousness" was not a "regular medical standard" followed even during surgery. JA764. More generally, the court found that petitioners "have not

presented any scientific study indicating a better method of execution by lethal injection." JA760-761 n.8.

Relying on these factual findings, the trial court also reached various conclusions of law, including that petitioners had failed to demonstrate any of the following critical points about "Kentucky's method of execution by lethal injection":

- it "deviates from contemporary norms and societal standards in capital punishment";
- it "offends the dignity of prisoners and society as a whole";
- it "inflicts unnecessary physical pain upon the condemned"; or
- it "inflicts unnecessary psychological suffering on the condemned."

JA761-763. The trial court also noted that, "[a]lthough evidence was presented that other drugs were available that *may* decrease the *possibility* that the condemned *may* experience pain," the Eighth Amendment "does not provide protection against *all* pain, only cruel and unusual pain." JA766 (emphasis added in part). Thus, except for one provision no longer at issue, the trial court concluded that the protocol did not "create a substantial risk of wanton and unnecessary infliction of pain, torture, or lingering death" and thus did not violate the Eighth Amendment. JA767-769.

The Supreme Court of Kentucky unanimously affirmed. JA798-809. As an initial matter, it noted that "matters of fact tried before a judge without a jury are to be reviewed under the clearly erroneous standard." JA801. That standard, the court explained, ensured that "due regard shall be given to the opportunity of the trial court to judge the credibility of the witnesses." *Id.* The court concluded that a "careful review" of the record "indicates there is no reason to believe that the circuit judge was clearly erroneous in any of his findings of fact." *Id.*

Next, the Kentucky Supreme Court, applying *de novo* review, upheld the district court's conclusion that petitioners' Eighth Amendment challenge to Kentucky's lethal injection protocol must be rejected. JA800, 805-808. Like the trial court, the Kentucky Supreme Court applied the "substantial risk" test drawn from *Gregg* and concluded that petitioners had failed to carry their burden of showing that Kentucky's protocol violated the Eighth Amendment under that test. JA800-801, 805, 807.

SUMMARY OF ARGUMENT

Petitioners have been sentenced to death. Kentucky seeks to execute them in a relatively humane manner, and has worked hard to adopt such a procedure. Yet petitioners contend that, as a matter of federal constitutional law, Kentucky was required to try harder and do better. Petitioners' argument has no precedent in this Court's Eighth Amendment decisions and should be rejected.

The Eighth Amendment prohibits governmental imposition of "cruel and unusual punishments," U.S. Const. Amend. VIII, and bars punishments involving the "unnecessary and wanton infliction of pain." *Gregg v. Georgia*, 428 U.S. 153, 171 (1976) (joint opinion). Historically, the focus has been on the pain actually inflicted by a given method of execution. *See, e.g., Wilkerson v. Utah*, 99 U.S. 130, 135 (1878). The party challenging a method of execution faces a "heavy burden" in attempting to overcome the presumption of validity afforded to a state's chosen method of execution. *Gregg*, 428 U.S. at 175.

In recent years, a number of state and federal courts have been forced to address whether and how the Eighth Amendment applies to allegations concerning the mere *risk* of future pain and suffering in connection with a method of execution. To ascertain the appropriate constitutional standard for this new variety of constitutional challenge, state and federal courts have applied by analogy the "substantial risk" standard utilized by this Court in comparable Eighth Amendment contexts. *See Gregg*, 428 U.S. at 188 (death sentence "could not be imposed under sentencing procedures that created a substantial risk that it would be inflicted in an arbitrary and capricious manner"); *Farmer v. Brennan*, 511 U.S. 825, 834 (1994) (for conditions-of-confinement claims based on a failure to prevent harm, "the inmate must show that he is incarcerated under conditions posing a substantial risk of serious harm"). Both the trial court and the Kentucky Supreme Court applied the "substantial risk" test in rejecting petitioners' claims. JA759, 800 (citing *Gregg*).

I. The "substantial risk" test applied by the lower courts is not only legally correct but also vastly superior to the flawed alternative proposed by petitioners. Petitioners urge this Court to forge a new interpretation of the Eighth Amendment under which any risk of pain and suffering is prohibited, no matter how small or remote the risk, if it is considered "unnecessary" in the sense that it can theoretically be reduced or eliminated by alternative drugs or procedures. In effect, petitioners' "unnecessary risk" standard places the states under a continuing obligation to adopt the "lowest risk" alternative that is "reasonably available," even if the risk being avoided is insignificant.

This "unnecessary risk" standard effectively negates the principle set forth in *Gregg* that the courts "may not require the legislature to select the least severe penalty possible so long as the penalty selected is not cruelly inhumane or disproportionate to the crime involved." *Gregg*, 428 U.S. at 175. Under petitioners' proposed approach, any method of lethal injection that does not minimize the risk of pain and suffering would apparently be deemed unconstitutional.

In addition to the "unnecessary risk" standard, petitioners contend that, once an alleged improvement to the protocol has been identified or becomes available, any potential risks arising out of a state's failure to immediately adopt the alleged improvement are deemed "foreseeable" and thus, in petitioners' view, avoidable, without regard to the magnitude of the risk. The purpose of this argument is to try to distinguish alleged risks arising out of

lethal injection procedures from the "unforeseeable" accident addressed in *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459 (1947). To be foreseeable, a risk of accident must not only be inherent in the method or protocol, but must also impose "a constitutionally significant risk of pain." *Taylor v. Crawford*, 487 F.3d 1072, 1080 (8th Cir. 2007). Thus, the risks described as "foreseeable" in petitioners' brief are not so in a legal sense because the evidence at trial showed them to pose an insubstantial risk of accidental pain and suffering.

In contrast to petitioners' proposed standards, the "substantial risk" standard applied by the Supreme Court of Kentucky provides the proper balance between the need to control the proliferation of insubstantial litigation (see *Hill v. McDonough*, 126 S. Ct. 2096, 2103 (2006)) and the interests of death row inmates who may have legitimate actions stating a claim for substantial risk of unnecessary and wanton pain and suffering.

The "substantial risk" standard has been applied, expressly or implicitly, by a number of courts that have had the opportunity to address the issue.[11] The few, isolated instances in which federal courts of appeals have attempted to implement approaches similar to petitioners' proposed "unnecessary risk" standard have resulted in judicial micromanagement on a scale not envisioned under *Gregg* or other applicable precedents of this Court. These judicial incursions into the states' traditional

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[11] *See, e.g., Taylor v. Crawford*, 487 F.3d 1072, 1080 (8th Cir. 2007) ("substantial risk").

authority over matters of enforcement of punishment have typically involved requirements for physician involvement in executions.

II. The Kentucky Supreme Court was also correct in concluding that petitioners failed to carry their burden of proving that the Commonwealth's lethal injection protocol violated the Eighth Amendment under the "substantial risk" test. The evidence established that Kentucky has incorporated safeguards into its lethal injection protocol that eliminate any substantial risk of thiopental not entering the condemned's circulatory system. These safeguards eliminate any substantial risk of an accident resulting in pain or suffering to a condemned.

The most fundamental safeguard contained in Kentucky's protocol is the specification of qualifications and training requirements for execution team personnel. JA981. All members of that team participate in at least 10 practice sessions per year. *Id.* All members must participate in at least two practices before participating in an actual execution. *Id.* Members of the IV team must have at least one year of experience in specified professions, and must remain certified in their profession and fulfill all continuing education requirements. *Id.* Kentucky's IV team consists of a practicing phlebotomist with eight years' experience and a certified EMT with 20 years' experience at the time of the trial. All IV team members were experienced at placing and starting IVs as part of their daily job positions at KDOC. JA273-274.

The experts at trial were in agreement that persons with this training and experience were qualified to reliably place IVs into a death-row inmate and confirm that the IVs functioned properly. Witnesses testified that KDOC employs EMTs and phlebotomists who are able to start IV lines. JA384. Witnesses testified that phlebotomists are typically used to train medical residents to insert IVs due to the phlebotomists' knowledge and proficiency in this area. JA385, 352. Even petitioners' medical expert, Dr. Heath, testified that starting an IV is relatively easy. JA517. The use of qualified medical personnel is the primary way Kentucky's protocol ensures that the entire three-gram dose of thiopental will enter the condemned's circulatory system.

Another safeguard in Kentucky's protocol is the requirement that IV team members establish both a primary IV line and a backup IV line before the administration of the lethal injection drugs. JA975. The IV team members also prepare two sets of lethal injection chemicals before the execution commences. JA987. The protocol provides that, if the condemned is not unconscious within 60 seconds after the Warden gives the command to "proceed," and the flow of thiopental to the primary IV site begins, the Warden must order the executioner to stop the flow of thiopental in the primary IV site, and to begin the flow of a new three-gram dose of thiopental into the backup IV site. JA979. The use of a backup IV eliminates the risk of pain and suffering in the event of the failure of the primary IV site. The 60-second window is also consistent with all medical testimony in ensuring that the condemned prisoner is unconscious.

As an additional safeguard, the Warden and the Deputy Warden are inside the execution room with the condemned watching for signs of IV failure due to problems with IV tubing or infiltration. JA316-317, 337. If signs of IV failure or infiltration occur during the flow of chemicals to the primary IV site, the Warden orders the executioner to immediately stop the flow of chemicals to the primary IV site, and to begin the flow of a new set of chemicals to the inmate through the backup IV site, beginning with a new three-gram dose of thiopental. JA317, 337, 978-979. Neither pancuronium nor potassium would be administered until a full three-gram dose of thiopental had been successfully administered, with no signs of IV failure or infiltration.

Despite these multiple safeguards, petitioners contend that Kentucky's lethal injection protocol creates an unconstitutional risk that less than three grams of thiopental will be delivered to the condemned's bloodstream because the Warden and Deputy Warden have no medical training to assist them in identifying signs of infiltration. Pet. Br. 15-19. But witnesses testified that the physical signs of infiltration would be obvious to an average person without medical training. JA353, 386, 601.

Petitioners' argument that alternative drugs are available that present less risk of pain and suffering is factually incorrect. While alternative drugs are available that will cause death, there was no evidence at trial that any of the alternative drugs discussed at trial would result in less risk of pain and suffering in a lethal injection setting.

Petitioners' contention that pancuronium presents an unconstitutional risk of pain and suffering is based on their presumption that inmates will be awake during administration of the drug. The courts below found, however, that administration of the three-gram dose of thiopental renders the inmate unconscious. JA762-763, 806-807. Petitioners also argue that pancuronium serves no legitimate purpose in an execution, but the Kentucky Supreme Court found that it served the legitimate purposes of preventing involuntary muscular movement and stopping breathing. JA806.

In their brief, petitioners argue for the first time that Kentucky's three-drug lethal injection protocol is unconstitutional due to the theoretical availability of an unproven one-drug alternative protocol in which thiopental is the only drug injected. The argument was not raised on appeal before the Supreme Court of Kentucky or mentioned in their petition for certiorari. Beyond that, Dr. Heath, petitioners' expert, testified that he would not expect a three-gram dose of thiopental to bring about death. JA498-499. Moreover, petitioners' argument that Kentucky's three-drug protocol is allegedly unconstitutional in light of a one-drug protocol is again based on their presumption that inmates will be awake during administration of the remaining drugs, but the courts below found to the contrary. JA762-763, 806-807. Furthermore, the proposed one-drug protocol raises new problems because it will generally take much longer for the condemned to die under the one-drug protocol.

Petitioners argue that Kentucky's protocol is constitutionally deficient because it does not incorporate a laundry list of procedures and safeguards used by anesthesiologists and other medical care providers in hospital settings. But the courts below found that administration of the three-gram dose of thiopental under Kentucky's protocol renders the inmate unconscious. JA762-763, 806-807.

ARGUMENT

I. The Kentucky Supreme Court Correctly Concluded That Petitioners' Eighth Amendment Challenge Was Properly Evaluated Under The "Substantial Risk" Test

The Eighth Amendment prohibits governmental imposition of "cruel and unusual punishments," U.S. Const. amend. VIII, and bars punishments involving unnecessary and wanton pain and suffering. *Gregg v. Georgia*, 428 U.S. 153 (1976). "Punishments are cruel when they involve torture or a lingering death. . ." *In re Kemmler*, 136 U.S. 436, 447 (1890). The meaning of "cruel and unusual" must be interpreted in a "flexible and dynamic manner," *Gregg*, 428 U.S. at 171, and measured against "the evolving standards of decency that mark the progress of a maturing society." *Trop v. Dulles*, 356 U.S. 86, 101 (1958) (plurality opinion).

The Kentucky courts thoroughly scrutinized Kentucky's method of lethal injection in light of the Eighth Amendment standard, and upheld Kentucky's protocol. JA759-760, 765-767, 800-801.

The trial court determined that Kentucky's method of lethal injection did not deviate from contemporary norms and societal standards. JA765. It concluded that the protocol did not offend the dignity of the condemned or of society as a whole. *Id.* It determined that the protocol did not inflict unnecessary physical or psychological pain upon the condemned. JA766. The trial court then determined that Kentucky's protocol did not present a substantial risk of wanton and unnecessary infliction of pain, torture, or lingering death, with the exception of one particular portion of the protocol, which Kentucky has agreed to eliminate.[12] After careful review, the Supreme Court of Kentucky upheld the trial court's findings and conclusions. JA808.

The sole question petitioners present regarding the Kentucky courts' application of the appropriate constitutional standard is whether a method of execution must create a "substantial" risk of wanton and unnecessary infliction of pain and suffering to implicate the Eighth Amendment's prohibition on cruel and unusual punishment.

For the reasons stated below, the Kentucky courts applied the appropriate standard in upholding the constitutionality of Kentucky's present method of lethal injection.

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[12] The trial court determined that "the procedure where the Department of Corrections attempts to insert an intravenous catheter into the neck through the carotid artery or jugular vein does create a substantial risk of wanton and unnecessary infliction of pain, torture or lingering death." JA767. During the course of the trial, KDOC had agreed to eliminate this procedure.

A. *Gregg* and *Farmer* supply the appropriate legal framework for resolving Eighth Amendment challenges to methods of execution as posing an unconstitutional risk of pain and suffering.

Historically, the Eighth Amendment standard has been stated and applied in terms of the pain and suffering actually resulting from a given method of execution. *See, e.g., Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 464 (1947) (infliction of "unnecessary pain"); *In re Kemmler*, 136 U.S. 436, 447 (1890) (infliction of "torture or lingering death"); *Wilkerson v. Utah*, 99 U.S. 130, 134-136 (1878) (infliction of "unnecessary cruelty"). The plain language of the Eighth Amendment speaks to the prohibition of "cruel and unusual punishments *inflicted*." U.S. Const. Amend. VIII (emphasis added). Even this Court's more recent pronouncements have expressed the standard in terms focusing on the actual infliction of pain and suffering. *See, e.g., Gregg v. Georgia*, 428 U.S. 153, 173 (1976) ("[T]he punishment must not involve the unnecessary and wanton *infliction* of pain.") (emphasis added).

The application of the Eighth Amendment to the mere *risk* of pain and suffering is a relatively new development, prompted by the recent proliferation of method-of-execution challenges. A growing number of state and federal courts have been forced to address whether or how the Eighth Amendment should be applied to a *risk* of pain and suffering. As guidance, the courts have applied by analogy the standard this Court uses in similar contexts involving Eighth Amendment protections.

In particular, state and federal courts have relied on *Gregg*, 428 U.S. at 173, and *Farmer v. Brennan*, 511 U.S. 825 (1994), in determining the appropriate standard for method-of-execution constitutional challenges. In *Gregg*, the Court applied the "substantial risk" standard to a claim that Georgia's sentencing procedures violated the Eighth Amendment. *Gregg*, 428 U.S. at 188 (stating that a death sentence "could not be imposed under sentencing procedures that created a substantial risk that it would be inflicted in an arbitrary and capricious manner"). In *Farmer*, the Court applied the "substantial risk" standard to Eighth Amendment conditions-of-confinement claims based on failure to prevent harm. *Farmer*, 511 U.S. at 834 (stating that "the inmate must show that he is incarcerated under conditions posing a substantial risk of serious harm").

The same practical considerations that drove the Court's choice of a "substantial risk" standard in *Gregg* and *Farmer* apply to the determination whether a risk of infliction of unnecessary pain rises to the level of a constitutional violation. In each instance, the Court has recognized that, to protect against an alleged future harm, claims of prospective Eighth Amendment violations may sometimes be cognizable. However, to prevent relief from being granted based on speculative claims of future injury, the Court has consistently imposed a standard requiring the proof of *significant* risk of future injury to state a cognizable claim of an Eighth Amendment violation. *Gregg*, 428 U.S. at 188; *Farmer*, 511 U.S. at 834.

Petitioners argue that the unique nature of the death penalty justifies the extension of the Eighth Amendment's protections to even *insubstantial* risks of future harm. In reality, it was only in recognition of the death penalty's uniqueness that this Court decided in *Gregg* to extend the protections of the Eighth Amendment to cover *substantial* risks of harm in connection with sentencing procedures. *Gregg*, 428 U.S. at 188 ("Because of the uniqueness of the death penalty, *Furman* held that it could not be imposed under sentencing procedures that created a *substantial risk* that the death sentence would be applied in an arbitrary and capricious manner."). It follows *a fortiori* that no standard requiring states to do more than protect against "substantial risk" can apply in the current setting – after all, the risk to be guarded against in *Gregg* was the risk of an arbitrary choice between life and death, while the risk to be guarded against here is only between less painful and unintentionally more painful forms of death. Regrettable though any unnecessary pain may be, it is hardly of greater magnitude than a life-or-death decision.

The focus remains on the objective evidence of the pain a prisoner will actually experience as a result of a particular method of execution. *Fierro v. Gomez*, 77 F.3d 301, 306 (9th Cir. 1996), *vacated on other grounds*, 519 U.S. 918 (1996); *Campbell v. Wood*, 18 F.3d 662, 668 (9th Cir. 1994); *State v. Webb*, 750 A.2d 448, 455 (Conn. 2000).

1. The Eighth Amendment does not require the elimination of remote or insubstantial risks of pain and suffering.

Petitioners advocate an unprecedented interpretation of the Eighth Amendment under which *any* risk of pain and suffering is prohibited, no matter how small or remote the risk, if it is an "unnecessary risk" in the sense that it can theoretically be reduced or eliminated by alternative means or procedures. Under petitioners' standard, a state's execution protocol would violate the Eighth Amendment any time alternatives became available to reduce the risk of pain or suffering further, even if the risk was already insignificant.

In effect, petitioners' "unnecessary risk" standard places the states under a continuing obligation to adopt the "least risk" alternatives reasonably available at any given time. By requiring the states to adopt the "least risk" alternative, petitioners' approach essentially renounces the principle stated in *Gregg* that the courts "may not require the legislature to select the least severe penalty possible so long as the penalty selected is not cruelly inhumane or disproportionate to the crime involved." *Gregg*, 428 U.S. at 175. Petitioners fail to recognize "[t]he deference [owed] to the decisions of the state legislatures under our federal system." *Id* at 176. In sum, petitioners' "unnecessary risk/least risk" approach removes the "presumption of validity" previously afforded a state's adopted method of execution. *Id*.

The breadth of petitioners' "unnecessary risk" argument is demonstrated by their argument that the Kentucky courts acted "myopically" by focusing on the insubstantial risk of pain and suffering posed by Kentucky's lethal injection protocol to them personally. Pet. Br. 42. Under petitioners' standard, an Eighth Amendment violation would exist if a method of execution presented a risk of "botched and inhumane executions as the procedures are employed repeatedly over time to execute hundreds or thousands of condemned prisoners." Pet. Br. 42. Given that some of the executions petitioners cite as being "botched" involve delays of as little as 10 minutes in siting an IV (*see* Denno, *supra*, 63 Ohio St. L.J. at 139, *cited in* Pet. Br. 9 n.7), it appears clear that petitioners' standard essentially requires the elimination of *all* risk of pain or suffering.

2. The Eighth Amendment has never required the elimination of risk of accident or human error.

As a corollary to the "unnecessary risk" standard, petitioners argue that, once an alleged improvement to the protocol is identified or becomes available, any potential risks arising out of a state's failure to immediately adopt the alleged improvement are deemed "foreseeable" and thus, in petitioners' view, avoidable, without regard to the magnitude of the risk. This "foreseeable risk" argument is intended as an attempt to distinguish *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459 (1947), in which the Court characterized a malfunction of Louisiana's electric chair that subjected the condemned to a non-lethal current of electricity

as "an unforeseeable accident" that did not "add an element of cruelty to a subsequent execution."

A "risk of accident cannot and need not be eliminated from the execution process in order to survive constitutional review." *Campbell*, 18 F.3d at 687. *See also Beardslee v. Woodford*, 395 F.3d 1064, 1070 (9th Cir. 2005); *Workman v. Bredesen*, 486 F.3d 896, 908 (6th Cir. 2007); *Taylor v. Crawford*, 487 F.3d 1072, 1080 (8th Cir. 2007). The proper focus is not the risk of accident, but "whether the written protocol inherently imposes a constitutionally significant risk of pain." *Taylor*, 487 F.3d at 1080. As the Eighth Circuit stated, "[i]f [a] protocol as written involves no inherent substantial risk of the wanton infliction of pain, any risk that the procedure will not work as designated in the protocol is merely a risk of accident which is insignificant in our constitutional analysis." *Id.* (citing *Resweber*, 329 U.S. at 464).

Even Dr. Heath, petitioners' expert, conceded this point. JA493-494. The Protocol also provides built-in safeguards that eliminate any significant risk that less than three grams of thiopental will be delivered to petitioners' bloodstreams. JA291-292. As a result, Kentucky's protocol does not present any foreseeable risk petitioners will suffer any unnecessary or wanton infliction of pain. *See, e.g.*, *Taylor*, 487 F.3d at 1085.[13]

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[13] In *Taylor*, 487 F.3d at 1085, the Eighth Circuit stated:

> The State's written protocol does not present any substantial foreseeable risk that the inmate will suffer the unnecessary or wanton infliction of pain. The abundant dose of thiopental . . . , combined with built-in checks to

The overbreadth of petitioners' "foreseeable risk" approach is demonstrated by their argument that a method of execution "creates a foreseeable danger of inflicting severe pain [when] that method, *performed repeatedly over time*, will inflict pain on a subset of executed inmates." Pet. Br. 35 (emphasis altered). This argument underscores petitioners' belief that all risks are foreseeable, regardless of how remote.

B. The "substantial risk" standard strikes the appropriate balance between the rights of the condemned and the states' compelling interest in the timely enforcement of criminal sentences.

The states have a compelling interest in the timely enforcement of criminal sentences, including death sentences. "[T]he power of a State to pass laws means little if the State cannot enforce them." *McCleskey v. Zant*, 499 U.S. 467, 491 (1991). In our federal system, the states also enjoy broad discretion to decide their procedures for conducting executions. *See Gregg*, 428 U.S. at 175-76. The "substantial risk" standard, borrowed by the Supreme Court of Kentucky from the *Gregg* opinion, strikes the appropriate balance between the rights of the condemned and the states' compelling interest in the timely enforcement of criminal sentences.

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ensure that the IV is properly placed by medical personnel trained for the procedure and that the IV is working and not obstructed, renders any risk of pain far too remote to be constitutionally significant.

1. The "substantial risk" standard provides ample incentive for states to improve their execution protocols when available alternatives provide substantial reductions in risk of pain and suffering.

Respondents have always been committed to conducting all executions in a humane manner. Only through the responsible enforcement of death sentences can KDOC carry out its statutory mandate under KRS § 431.220. Through the General Assembly, the citizens of the Commonwealth have adopted lethal injection as the primary method of execution. Respondents are dedicated to carrying out that mandate in the safest, most reliable manner. Significant time and resources are expended in these efforts, including monthly training. JA318-319.

Respondents have demonstrated their willingness to modify Kentucky's lethal injection protocol voluntarily when the proposed changes promote the safe and responsible enforcement of death sentences. For example, respondents increased the dose of thiopental from two grams to three grams when, in consultation with KDOC's Medical Director, Dr. Haas, it was determined that the increased dosage would further reduce the remote risk of consciousness, without creating new risks or obstacles to the safe and secure conducting of executions. JA382-384. Respondents also made voluntary modifications to the protocol to formalize in writing the qualifications and training requirements applicable to execution personnel. JA984.

Those modifications were made to the protocol without prompting from any court. In its opinion below, the trial court commended respondents for their unilateral efforts to improve the protocol. JA768.[11] Imposition of standards that divert respondents' attention and resources to dealing with insubstantial risks will not promote more humane executions in the Commonwealth.

2. The "substantial risk" standard promotes certainty and discourages perpetual litigation, while protecting legitimate Eighth Amendment rights.

The "substantial risk" standard promotes certainty and stability in the law by allowing the courts to dismiss insubstantial claims, while providing condemneds a means of challenging any lethal injection methods or procedures that may genuinely present a substantial risk of unnecessary pain and suffering.

Application of petitioners' proposed "unnecessary risk" standard or their related "foreseeable risk" argument would expose Kentucky and other death penalty states to unending litigation over their execution protocols. *See Hill v. McDonough*, 126 S. Ct. at 2103 (recognizing this possibility). Implementation of these standards would effectively allow

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[11] In contrast, when the trial court asked petitioners' expert witness, Dr. Heath, whether he would ever entertain the possibility of contracting with the Commonwealth to assist in improving the lethal injection protocol, Dr. Heath declined. JA540. He indicated that he believed any such assistance would be a violation of a doctor's ethical obligations. *Id.*

death row inmates to state a cognizable claim simply by alleging that alternative methods or procedures offer reductions in the risk of pain and suffering. Even purely speculative claims might prevail due to the lack of any requirement to prove the existence of a substantial risk of pain and suffering.

Under existing Eighth Amendment law, "a heavy burden rests on those who would attack the judgment of the representatives of the people" regarding a state's selection of its method of execution. *Gregg*, 428 U.S. at 175. The proposed "unnecessary risk" standard, in combination with petitioners' "foreseeable risk" principle, would greatly expand the potential for new litigation. Death row inmates could raise new claims simply by contending that redundant procedures and safeguards should be added to further reduce the already insubstantial risk of pain and suffering.

The "substantial risk" standard has been successfully applied in related Eighth Amendment contexts. *Gregg*, 428 U.S. at 188; *Farmer*, 511 U.S. at 834. The same "substantial risk" standard is appropriate in the context of determining whether a method of execution poses a constitutionally significant risk of unnecessary and wanton pain and suffering.

II. The Kentucky Supreme Court Correctly Concluded That The Commonwealth's Lethal Injection Protocol Does Not Violate The Eighth Amendment

A. The record establishes that Kentucky's protocol poses no substantial risk of unnecessary pain or suffering.

The evidence presented below convincingly established that Kentucky's three-drug lethal injection protocol eliminates any substantial risk that a condemned would ever experience unnecessary pain or suffering during an execution. Furthermore, two courts below made factual findings to that effect. Those findings must be respected. As Justice Kennedy wrote for a plurality in *Hernandez v. New York*, 500 U.S. 352, 366 (1991) (citations omitted):

> The reasons justifying a deferential standard of review in other contexts . . . apply with equal force to our review of a state trial court's findings of fact made in connection with a federal constitutional claim. Our cases have indicated that, in the absence of exceptional circumstances, we would defer to state-court factual findings, even when those findings relate to a constitutional issue. Moreover, "an issue does not lose its factual character merely because its resolution is dispositive of the ultimate constitutional question."

1. The administration of three grams of thiopental eliminates all risk of pain or suffering once it enters a condemned's bloodstream.

Dr. Heath, petitioners' own expert witness at trial, testified that the delivery of three grams of thiopental into a condemned's circulatory system is sufficient to ensure a quick, humane, pain-free death under Kentucky's three-drug lethal injection protocol. When questioned about the effects of administering three grams of thiopental as called for in Kentucky's protocol, Dr. Heath stated that the recipient would be unconscious within 60 seconds of administration and would remain unconscious for many hours. JA497, 499. He conceded that "[i]f successfully administered, the thiopental would render them deeply unconscious, to the point where no stimulation, even the painful stimulation of potassium, would cause any response." JA541.

KDOC Medical Director Dr. Haas agreed with petitioners' expert that a person given a three-gram dose of thiopental would be rendered unconscious for hours. JA381. Dr. Steven Hiland, a KDOC physician, also testified that the administration of three grams of thiopental would render an individual unconscious for a significant period of time. JA352.

Respondents' expert, Dr. Dershwitz, is a practicing anesthesiologist and a pharmacokineticist with expertise in researching the time course and effects of intravenous anesthetic agents like thiopental. JA544. Dr. Heath conceded that Dr. Dershwitz has far more experience in

pharmacokinetics. JA485. Dr. Dershwitz testified that he had actual experience administering three-gram dosages of thiopental to patients in a clinical setting. JA549. He testified that a human being of average size, if administered a three-gram dose of thiopental, would be rendered unconscious in less than a minute and would remain unconscious for hours thereafter. JA547-549.

Based on this evidence, the trial court found that "[t]hree grams of sodium thiopental, when administered properly, will render a person unconscious within one minute of injection." JA763. The Kentucky Supreme Court unanimously approved the trial court's findings of fact, adding that "[a]t this level of ingestion the person is rendered unconscious for hours." JA806.

2. Kentucky has incorporated safeguards into its lethal injection protocol that eliminate any substantial risk of thiopental not being delivered into a condemned's bloodstream.

Given the lack of dispute as to the adequacy of the three-gram dose of thiopental to eliminate the risk of pain once it enters a condemned's circulatory system, the only actual point of contention in this case is whether Kentucky's lethal injection protocol creates an unconstitutional risk of thiopental not entering the condemned's circulatory system.

The record establishes that Kentucky has incorporated safeguards into its lethal injection protocol that eliminate any substantial risk of

thiopental not entering the condemned's circulatory system. Furthermore, the record establishes that these safeguards eliminate any substantial risk of an accident resulting in pain or suffering to a condemned.

The most significant safeguards built into Kentucky's execution protocol are the specifications for qualifications and training of the execution team personnel who are responsible for placing the IVs into the condemned. To serve on the IV team, a person must have at least one year of professional experience as a Certified Medical Assistant, Phlebotomist, EMT, Paramedic, or Military Corpsman. Members of the IV team must remain certified in their profession and fulfill all continuing education requirements. The protocol requires the execution team to practice at least 10 times per calendar year, with each practice to include a complete walk-through of an execution, including the siting of IVs into a volunteer. JA984.

The evidence established that KDOC's IV team consisted of qualified medical personnel who were proficient in starting IVs as part of their everyday job assignments at KDOC. IV team member #1 had approximately eight years experience as a practicing phlebotomist, and had been on KDOC's execution team for about 18 months at the time of the trial. IV team member #2 had been a certified EMT for about 20 years at the time of the trial, and had been on KDOC's execution team since 1997. JA273-274.

The experts were in agreement that persons with this level of training and experience were

qualified to reliably place IVs into a condemned and confirm that the IVs functioned properly. KDOC's Medical Director, Dr. Scott Haas, testified that KDOC employs EMTs and phlebotomists who are able to start IV lines. JA384. Both Dr. Haas and Dr. Steve Hiland testified that phlebotomists are typically used to train medical residents to insert IVs due to the phlebotomists' knowledge and proficiency in this area. JA385, 352. Dr. Dershwitz testified that "almost all hospitals now have teams of technicians for doing things like putting in IVs and doing other things that interns and residents used to have to do." JA580. Even petitioners' medical expert, Dr. Heath, testified that starting an IV is relatively easy. JA517.

By employing qualified medical personnel to perform the necessary venipunctures and establish venous access, Kentucky's protocol ensures that the entire three-gram dose of thiopental will enter the condemned's circulatory system except in cases of IV failure. Petitioners implicitly concede this point in their brief, but contend that Kentucky's protocol creates an unconstitutional risk of thiopental not entering a condemned's circulatory system due to IV failure after IV team members have established venous access.

The primary safeguard incorporated into Kentucky's lethal injection protocol to ensure delivery of three grams of thiopental to a condemned's circulatory system is the general requirement that IV team members establish both a primary IV line and a backup IV line before the administration of the lethal injection drugs. JA975.

The IV team members also prepare two sets of lethal injection chemicals before the execution commences. JA987. The protocol provides that if the condemned is not unconscious within 60 seconds of the time the Warden gives the command to "proceed," and the flow of thiopental to the primary IV site begins, the Warden must order the executioner to stop the flow of thiopental in the primary IV site, and to begin the flow of a new three-gram dose of thiopental into the backup IV site. JA979. The use of a backup IV eliminates the risk of pain and suffering in the event of the failure of the primary IV site. The 60-second window is also consistent with all medical testimony in assuring the condemned is unconscious.

As an additional safeguard, the Warden and Deputy Warden are physically inside the execution room with the condemned watching for signs of IV failure due to problems with IV tubing or infiltration. JA316-317, 337. If signs of IV failure or infiltration occur during the flow of chemicals to the primary IV site, the Warden would order the executioner to immediately stop the flow of chemicals to the primary IV site and to begin the flow of a new set of chemicals to the inmate through the backup IV site, beginning with a new three-gram dose of thiopental. JA317, 337, 978-979. Neither pancuronium nor potassium would be administered until a full three-gram dose of thiopental had been successfully administered, with no signs of IV failure or infiltration.

Despite these safeguards, petitioners contend that Kentucky's lethal injection protocol creates an unconstitutional risk that less than three grams of

thiopental will be delivered to the condemned's bloodstream because the Warden and Deputy Warden have no medical training to assist them in identifying signs of infiltration. Pet. Br. 15-19. However, the record establishes that the physical signs of infiltration, given the amount and volume of thiopental solution injected, would be visible and obvious, even to persons with no medical background or training. JA353, 386, 600.

Under Kentucky's protocol, the three grams of thiopental are dissolved into 20 milliliters of sterile solution, resulting in a thiopental solution filling two 60cc syringes. JA300-301, 313. Dr. Haas, the KDOC Medical Director, testified that "[i]t would be very obvious," even to someone without a medical background, if infiltration occurred at an IV site with the amount of thiopental used during an execution in Kentucky. JA386. Dr. Steve Hiland, a KDOC physician at the Kentucky State Penitentiary, testified that the swelling would be "obvious" to "an average person." JA353. Dr. Dershwitz agreed, stating, "you'd also know that the thiopental wasn't working well before you started the injections of anything else." JA600. Dr. Dershwitz went on to explain that "[b]ecause thiopental is a solution of pH 10 . . . [i]f the thiopental were to go into any tissue site other than a vein, the inmate would not lose consciousness." JA601. Dr. Heath did not contradict the testimony of Dr. Dershwitz, Dr. Haas, or Dr. Hiland that signs of infiltration would be visible and obvious during an execution, even to persons with no medical training, due to the characteristics and amount of thiopental solution administered in an execution. JA462-463.

Petitioners contend that the December 13, 2006 execution of Angel Diaz in Florida shows that continuous monitoring for consciousness and other additional procedures are required in order to remove the risk of inmates remaining conscious during executions. Their argument overlooks the findings of the Florida Supreme Court and the Florida Governor's Commission on Administration on Lethal Injection that problems encountered during the Diaz execution were *not* due to any inherent deficiencies in Florida's three-drug protocol, but rather, were attributable to failure to follow the written protocol. *See Lightbourne v. McCollum*, --- So.2d ---, 2007 WL 3196533, at *21 (Fla. Nov. 7, 2007).[15]

Kentucky's lethal injection protocol thus eliminates any substantial risk that petitioners will receive less than the three-gram dose of thiopental called for under the protocol, thereby assuring them a humane death. The additional procedures identified by petitioners, while appropriate in a surgical setting, are not necessary or even appropriate in the context of an execution. Federal courts of appeals that have addressed the issue agree that "[f]or exceedingly practical reasons, no State can carry out an execution in the same manner that a

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[15] In addition, petitioners ignore the fact that Dr. Heath, who also testified as an expert witness in the *Lightbourne* case, could not say with certainty whether Diaz was "awake" when the second and third drugs were administered. *Lightbourne*, 2007 WL 3196533, at *15. Another expert in *Lightbourne*, Georgia Chief Medical Examiner Dr. Kris Sperry, opined that thiopental would be absorbed before the remaining two chemicals, thereby preventing Diaz from experiencing pain. *Id.*

hospital monitors an operation." *Taylor v. Crawford*, 487 F.3d at 1084 (*quoting Workman v. Bredesen*, 486 F.3d at 910).

In *Taylor*, the Eighth Circuit upheld Missouri's three-drug lethal injection protocol in the face of a similar constitutional challenge, stating:

> [T]he protocol mandates a dose [of sodium thiopental] large enough to render anyone deeply unconscious, as long as it is delivered properly. The protocol is designed to ensure a quick, indeed a painless, death, and thus there is no need for the continuing careful, watchful eye of an anesthesiologist or one trained in anesthesiology, whose responsibility in a hospital's surgery suite (as opposed to an execution chamber) is to ensure that the patient will wake up at the end of the procedure.

487 F.3d at 1084.

B. The record is devoid of proof that any alternative drugs identified by petitioners pose substantially less risk than the drugs currently used in Kentucky's protocol.

Petitioners' contention in their Petition for Certiorari was that the record below established the availability of alternative chemicals that pose less risk of pain and suffering than the drugs currently used for lethal injection in Kentucky and other states. In particular, the Petition for Certiorari identifies Propofol and Dilantin as allegedly

presenting less risk than chemicals currently used in Kentucky's protocol, although no citations to the record were included.

Surprisingly, petitioners' brief fails to address the issue raised in the Petition for Certiorari of whether Propofol, Dilantin, or any other alternative drugs actually pose less risk than those currently used in Kentucky and other lethal injection states. Petitioners' brief does not even mention Propofol, Dilantin, or any other alternative drugs. Petitioners also failed to identify any alternative drugs in their appeal before the Kentucky Supreme Court. Appellants' Brief at 39, 44.

Petitioners' argument must fail because of the lack of proof below that Propofol, Dilantin, or any other alternative drugs pose substantially less risk of pain and suffering in an execution setting than the drugs currently used under Kentucky's protocol.

The only alternative drug addressed by Dr. Heath, petitioners' expert, was Propofol. Dr. Heath never stated that Propofol would pose less risk than thiopental in the context of an execution. Instead, Dr. Heath explained why Propofol has become more popular in surgical settings than thiopental, stating that "it's got a slightly more convenient time course of onset and offset and affects on . . . vital signs and things like that . . . [I]t's a little bit of an easier drug to work with." JA430. Even in the surgical context, Dr. Heath described Propofol as being only "*somewhat* more safer [*sic*] and convenient and better attributes." *Id.* In addition, Dr. Heath testified that thiopental "is a very usable drug." *Id.*

Dr. Heath did not identify any other alternative drugs in his testimony. He alleged that there are "many non-painful ways of stopping the heart," but he did not identify any. JA427. No other witness testified as to the availability of alternative, less risky chemicals for lethal injections.

Dr. Dershwitz testified, "Propafol [sic] is a shorter-acting drug [than sodium thiopental], which is why it's more commonly used in anesthesia today, because we typically want our patients to wake up quicker so they can be more quickly discharged from the hospital." JA555. Thus, the fact that Propofol is now used more than thiopental in surgical settings is no indication that Propofol would pose less risk than thiopental in an execution. Dr. Dershwitz testified that "Propafol [sic] is used more commonly than thiopental [in surgical settings] because thiopental is longer lasting." JA555.

Dr. Dershwitz also testified that "Dilantin would stop the heart within a few minutes. Not as fast as potassium, but it would stop the heart within a matter of minutes." JA628. In their brief, petitioners erroneously imply that Dr. Dershwitz testified "there are other cardiotoxic drugs [besides potassium] that will stop the heart *without causing pain*." Pet. Br. 54 (emphasis in original). However, Dr. Dershwitz was not asked, and neither he nor any other witness ever testified, that Dilantin posed any less of a risk of pain than potassium. Dr. Dershwitz testified that Dilantin would pose less risk of involuntary muscle contractions during an execution, but that involuntary muscle contractions were not a sign that a condemned was experiencing pain.

JA561. Dr. Heath also testified that no pain was associated with involuntary muscle contractions. JA541.

Furthermore, the record is devoid of evidence establishing that any other drug alternatives would pose less risk of pain and suffering than the drugs utilized in Kentucky's lethal injection protocol. The only other drugs discussed at trial as possible alternatives were pentobarbital and Digoxin. The testimony regarding pentobarbital was that, at a dosage of three grams, it would have "about the same duration of action" as thiopental. JA557. Only at lower doses would pentobarbital be slightly longer lasting than thiopental. JA556. The testimony regarding Digoxin rejected it as an alternative to potassium in an execution because it "would take minutes to hours to bring the heart to a stop." JA627.

Petitioners' belief that Kentucky's lethal injection protocol is unconstitutional, in light of this scant evidence of risk reduction, underscores the havoc that application of their "unnecessary risk" standard would wreak on the states' good-faith efforts to humanely enforce lawful sentences of death by means of lethal injection. Death-row inmates across the nation would be free to mount repeated constitutional challenges based on unsubstantiated allegations of alternative chemicals. State and federal courts would be stripped of the means to summarily dispose of meritless claims due to imposition of a standard that would confer constitutional significance to claims alleging the

potential for *insignificant* reductions in risks of pain and suffering.

C. Kentucky's use of pancuronium does not present a substantial risk of pain or suffering.

Petitioners argue at length that pancuronium presents an unconstitutional risk of pain and suffering in light of the fact that administration of the other two lethal injection chemicals would be sufficient to cause death in its absence. Petitioners further contend that pancuronium serves no legitimate purpose in the lethal injection protocol and that its elimination would reduce the risk of pain and suffering to petitioners.

The record establishes that pancuronium performs a number of legitimate functions in the lethal injection protocol, and its removal from the protocol would result in involuntary muscle contractions which might give the impression that the inmate feels pain, even though the medical evidence presented established that an inmate wouldn't feel pain from such a drug.

1. The record establishes that Kentucky's lethal injection protocol eliminates any substantial risk of pain or suffering arising from the use or administration of pancuronium.

Petitioners' objections to the use of a paralytic agent like pancuronium are tied to their belief that Kentucky should carry out executions in the same

manner that an anesthesiologist would monitor a patient during surgery. In effect, petitioners allege that paralysis of the condemned would render ineffective the other additional safeguards that petitioners argue are necessary to transform the execution chamber into a surgical suite, complete with an anesthesiologist and monitoring equipment.

Petitioners' argument ignores the obvious differences between an execution and a surgical setting. Dr. Heath estimated that, in a surgical setting, there was one in 500 cases of conscious awareness. JA414. But Dr. Dershwitz testified that he had never heard of a case of conscious awareness where a three-gram dose of thiopental had been given. JA630. The testimony at trial established that the three-gram dose of thiopental used in an execution in Kentucky represents a tenfold increase over the 300-milligram dose typically used in a surgical procedure. JA548. All experts at trial agreed that, if administered properly, a three-gram dose of thiopental would render petitioners unconscious for hours, with essentially no chance of regaining consciousness during the execution. Even Dr. Heath, petitioners' expert, conceded this point. JA541.

As stated above, Kentucky's protocol contains safeguards that eliminate any substantial risk that less than three grams of thiopental will be delivered to the condemned's bloodstream. The protocol ensures the delivery of thiopental to the inmate's circulatory system by utilizing a backup IV and a second three-gram dose of thiopental in the event of failure of the primary IV site, or under any

circumstances in which unconsciousness is not achieved within 60 seconds of administration of the initial three-gram dose of thiopental.

2. Pancuronium serves the legitimate functions of stopping respiration, preventing involuntary muscular contractions, and providing for a dignified death.

The Supreme Court of Kentucky found that pancuronium served the legitimate purpose of "suspend[ing] muscular movement and . . . stop[ping] respiration or breathing." JA806. These findings were supported by Dr. Dershwitz' testimony. JA559. The spontaneous, involuntary muscle contractions that would likely occur in the absence of pancuronium would not be indicative of pain to the condemned. JA561-562. After administration of the three-gram dose of thiopental, the inmate would be unaware of his surroundings, and nothing would be perceptible to him. *Id.*

Petitioners' own expert witnesses conceded that pancuronium's primary function in an execution is to prevent involuntary muscle contractions that would otherwise result from administration of the other lethal injection chemicals. JA523-524. The secondary function of pancuronium is to cause cessation of breathing or respiration. JA763. *See Workman*, 486 F.3d at 909. "[P]ancuronium bromide . . . speeds the death process, prevents involuntary muscular movement that may interfere with the proper functioning of the IV equipment, and contributes to the dignity of the death process."

Petitioners essentially dismiss the risk that spontaneous, involuntary muscle contractions could disrupt an execution by interfering with an IV. Their rejection of this risk is puzzling, given their own expert witnesses' testimony of the high probability of involuntary muscle contractions in the absence of pancuronium. Their position is even more puzzling in view of the overwhelming concern petitioners have expressed over far more remote risks. The likelihood of involuntary muscle contractions establishes that pancuronium performs a legitimate function in reducing the risk of disruption during an execution, thus leading to a humane death.

Petitioners also dismiss respondents' contention that pancuronium performs a legitimate function by preventing violent muscle contractions that could be incorrectly interpreted as signs of pain or suffering. Petitioners argue that involuntary muscle contractions have no bearing on the dignity of condemned, since the administration of thiopental renders the inmate impervious to pain. However, petitioners' argument ignores the impact on family members and other witnesses who view the involuntary contractions.

The Eighth Amendment forbids punishments that are not in accord with "the dignity of man, which is the basic concept underlying the Eighth Amendment." *Gregg*, 428 U.S. at 173 (internal quotation marks and citations omitted). The record establishes a high probability that in the absence of pancuronium or a similar paralytic agent, condemneds will experience spontaneous, involuntary

muscle contractions that family members and other witnesses will misperceive as signs of pain and suffering.

Respondents are not alone in their concern of whether a paralytic agent is required to avoid an affront to the dignity of man. All 37 states that have adopted lethal injection as a method of execution include a paralytic agent as part of their protocol. In 14 of these states, the state legislatures have enacted legislation that specifically requires use of a paralytic agent.[16]

3. Comparisons between lethal injection and animal euthanasia are misleading and inapposite.

Petitioners argue that pancuronium should not be used in human executions because it is not typically used by veterinarians to euthanize animals. Essentially, petitioners argue that the American Veterinary Medical Association (AVMA) treats animals better during euthanasia than Kentucky treats human beings in an execution.

This comparison is misleading for a number of reasons. First and foremost, the circumstances under

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[16] Arkansas, A.C.A. § 5-4-617; Idaho, I.C. § 19-2716; Illinois, 725 ILCS 5/119-5; Maryland, MD Code, Correctional Services, § 3-905; Mississippi, Miss. Code Ann. § 99-19-51; Montana, MCA 46-19-103; New Hampshire, N.H. Rev. Stat. § 630:5; New Jersey, N.J.S.A. 2C:49-2; New Mexico, N.M.S.A. 1978, § 31-14-11; North Carolina, N.C.G.S.A. § 15-188; Oklahoma, 22 Okl. St. Ann. § 1014; Oregon, O.R.S. § 137.473; Pennsylvania, 61 P.S. § 3004; Wyoming, W.S. 1977 § 7-13-904.

which animals are euthanized and those attendant to the execution of a human being are so wholly different as to render any such comparison absurd. Dr. Geiser, a veterinarian, admitted that the AVMA approves or allows all of the following methods of euthanasia for certain animals: a penetrating captive bolt (which stuns an animal to death); thoracic compression (which euthanizes small animals in a chamber); cervical dislocation (which severs the spinal chord); and finally, blows to the head, decapitation, electrocution, and gun shots. 6 Tr. 758, 759. Thus, petitioners' contention that animals are euthanized under conditions superior to condemneds must fail.

D. The theoretical alternative of an untested one-drug protocol utilizing thiopental as the sole lethal injection chemical does not render Kentucky's three-drug protocol unconstitutional.

In their brief, petitioners argue for the first time that Kentucky's three-drug lethal injection protocol is unconstitutional due to the theoretical availability of an untested alternative protocol in which thiopental is the only lethal injection chemical.[17]

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[17] While Baze and Bowling argued on appeal to the Kentucky Supreme Court that inclusion of a paralytic agent such as pancuronium in Kentucky's protocol violated the Eighth Amendment, they never argued that inclusion of a cardiotoxic drug to stop the heart was unnecessary or that it violated the Constitution. Instead, Baze and Bowling argued that unidentified alternative drugs could be substituted for potassium to trigger cardiac arrest. Appellants' Brief at 37. Notably, Baze and Bowling raised no argument to the Kentucky

Petitioners' argument is apparently grounded in their newfound belief that death can be achieved through administration of thiopental alone. At trial, Dr. Heath testified that he would not expect a three-gram dose of thiopental to kill a person, even if no other measures were taken. JA498-499.

Aside from the fact that Baze and Bowling failed to raise this argument before the Kentucky Supreme Court,[18] their argument must also be rejected due to its lack of merit and its failure to account for other constitutional issues raised by the proposed one-drug protocol.

The trial court and the Supreme Court of Kentucky agreed that the record established that the safeguards included in Kentucky's protocol already eliminate any substantial risk of unnecessary pain or suffering. JA760-764, 805-808; *see also Taylor*, 487 F.3d at 1085. Second, while Kentucky's three-drug protocol is tested and proven effective, petitioners' proposed one-drug protocol remains untested and unreliable.

Supreme Court alleging that Kentucky's three-drug protocol was unconstitutional due to the availability of any one-drug protocol utilizing thiopental as the only drug.

[18] *See* note 17, *supra*. This Court generally does not consider questions or arguments that were not raised on appeal in the courts below. *See, e.g., Office of Personnel Management v. Richmond*, 496 U.S. 414, 440 (1990); *Delta Air Lines, Inc. v. August*, 450 U.S. 346, 362 (1981). "These rules apply to all arguments, even those of constitutional dimension." *Richmond*, 496 U.S. at 440. The issue should thus be deemed forfeited due to petitioners' failure to raise it on appeal before the Supreme Court of Kentucky.

Kentucky's three-drug protocol already contains safeguards that eliminate any substantial risk that a condemned would remain conscious when pancuronium and potassium are administered. Petitioners' allegations that Kentucky's three-drug protocol presents an unconstitutional risk are based on speculation and conjecture, and are tied to petitioners' erroneous interpretation of the Eighth Amendment as prohibiting any theoretical risk of pain or suffering.

Furthermore, any attempt to employ petitioners' unproven one-drug protocol would raise new Eighth Amendment issues and practical problems that make it infeasible to implement in Kentucky. The proposed one-drug protocol would present problems determining the time of death in Kentucky and in other states that utilize an EKG monitor to determine time of death. Kentucky Revised Statute § 431.220(3) prohibits physicians from participating in an execution in any manner, "except to certify cause of death provided that the condemned is declared dead by another person." Thus, Kentucky's statute prohibits a doctor from performing an examination to determine the time of death.

Petitioners go outside the record to cite proceedings of a Tennessee committee referred to in *Harbison v. Little*, No. 3:06-1206, 2007 WL 2821230 (M.D. Tenn. Sept. 19, 2007) to imply that Dr. Dershwitz, respondents' expert at trial, now supports the use of the one-drug protocol. This hearsay information is erroneous. If the Court is going to consider this hearsay from outside the record, respondents ask the Court also to consider

Dr. Dershwitz' actual testimony in the *Harbison* case, in which he denies ever recommending one protocol over any other. Dershwitz trial deposition at 21.

In accordance with Supreme Court Rule 32(3), respondents have delivered to the Clerk and served on the parties a letter describing Dr. Dershwitz' trial deposition filed in *Harbison*, setting forth the reasons why it may be properly considered by the Court, and asking that a certified copy of Dr. Dershwitz' trial deposition be lodged with the Court for consideration.

E. Theoretical alternative practices and procedures used in surgical settings do not render Kentucky's three-drug protocol unconstitutional.

Petitioners devote a significant portion of their brief to arguing that respondents should incorporate a number of practices and procedures used by surgeons and anesthesiologists in hospital settings to further reduce the already insubstantial risk of pain and suffering associated with Kentucky's lethal injection protocol.

Petitioners' arguments concerning these alternative practices and procedures were not raised in their Petition for Certiorari, which focused on the appropriate legal standard, the availability of alternative drugs, and the availability of alternative means of execution that eliminate pancuronium from the lethal injection protocol. The Petition for Certio-

rari does not even identify the alternative practices and procedures argued for in petitioners' brief.

"[T]his Court's normal practice is to refuse to consider arguments not presented in the petition for certiorari." *Office of Personnel Management v. Richmond*, 496 U.S. 414, 440 (1990); *Lawn v. United States*, 355 U.S. 339, 362-63 n.16 (1958); *Radio Officers v. NLRB*, 347 U.S. 17, 37 n.35 (1954). The Court accordingly should disregard these arguments.

Nonetheless, petitioners' arguments for applying medical practices and procedures to executions overlook the obvious differences between conducting a surgical procedure in a hospital setting and conducting an execution in a maximum security prison setting. Petitioners' arguments also ignore the fact that Kentucky's lethal injection protocol already eliminates any substantial risk of pain or suffering during an execution.

1. The perceived risks identified by Petitioners are insubstantial and could only arise in the event of an accident arising out of failure to follow the written protocol.

a. Kentucky's protocol presents no substantial risk of error relating to preparation of the chemicals or filling the syringes for an execution.

First, petitioners contend that Kentucky's method of preparing and injecting the lethal

injection drugs is prone to error. In essence, petitioners argue that the execution team members who prepare the drugs and fill the syringes are not adequately qualified or trained to carry out this task. Pet. Br. 45-46. Petitioners believe that the IV team members are not capable of following the manufacturer's simple instructions for preparing the lethal injection drugs.

Petitioners exaggerate the complexity of the task of preparing the drugs and syringes used in a lethal injection. According to petitioners, "[t]he IV team must mix thiopental from multiple kits, calculate the appropriate dose, and lead it into syringes." Pet. Br. 29. The evidence at trial established that the process was simple and that no medical training was required to prepare the drugs. Dr. Haas testified that preparing the drugs was not difficult at all, analogizing it to mixing Kool-Aid. He stated that "[y]ou take a liquid, you inject it into a vial with the powder, then you shake it up until the powder dissolves and you're done. The instructions are on the package insert." 5 Tr. 695. The trial court, after weighing the evidence, found that there was only a "minimal risk" that execution personnel would improperly mix or prepare the lethal injection drugs. JA761-762.

b. Kentucky's protocol does not present any problems with improper connection of IVs or infiltration that would create substantial risk of pain or suffering.

Petitioners contend that Kentucky's procedures for IV insertion create a likelihood of problems with improperly connected catheters and infiltration. Pet. Br. 46. Petitioners apparently concede that the phlebotomists, EMTs, and other medical professionals who qualify for KDOC's IV team are proficient in placing and starting peripheral IVs, but argue that Kentucky's protocol creates an unconstitutional risk of pain and suffering by failing to provide for the use of a central line for venous access for condemneds with severely compromised veins due to medical conditions or histories of drug use. Pet. Br. 46-47.

Petitioners now contend that Kentucky's protocol is unconstitutional due to the lack of a provision for central line venous access, given that petitoners opposed respondents' former procedure that allowed execution personnel to use a central line through the carotid artery or the jugular vein as a last resort, if venous access could not be established through peripheral IV placement.

Petitioners now claim that they suffer from compromised veins after failing to make this argument at trial; therefore this issue has been waived. Indeed, when petitioners filed motions to intervene in the ongoing federal district court lethal

injection action. *Moore v. Rees*, No. 06-CV-22 (E.D. Ky., filed April 19, 2006), petitioners each filed affidavits stating that they did not have compromised veins.

In almost 10 years of conducting monthly lethal injection practices, the IV team had never encountered problems establishing peripheral venous access. JA319. While petitioners argue that prison inmates are more likely than the general population to suffer from compromised veins, the record established that KDOC's IV team members were both long-time KDOC employees who place and start IVs in prison inmates as part of their regular jobs as a KDOC phlebotomist and EMT. JA273-274. The IV team members are probably the most qualified to start an IV since they deal with inmates on a daily basis.

In addition to the remoteness of the risk of being unable to gain peripheral venous access, the record also established that the condemned would not be exposed to a substantial risk of pain and suffering in the unlikely event that the IV team is unable to establish peripheral venous access. The written lethal injection protocol gives the IV team up to 60 minutes to attempt to establish peripheral IV access. JA976. If the IV team is unable to successfully place and start the peripheral IV catheters within the allotted 60-minute time frame, the protocol requires the execution to cease and for the Warden to contact the Governor. *Id.* The Governor would then be asked to reschedule the execution for a later date. *Id.*

The condemned would not be subjected to a significant risk of unconstitutional pain or suffering. Petitioners argued at trial that 60 minutes of attempting to site a peripheral IV amounted to cruel and unusual punishment, but these arguments were not supported by the record and were rejected by the trial court. JA762. Even Dr. Heath, petitioners' expert, testified that he would spend up to 30 minutes attempting to cite an IV before asking someone else to give it a try. JA479.

c. The proximity of execution personnel to the condemned and the failure to administer the lethal injection drugs from bedside does not create a substantial risk of pain or suffering.

Petitioners contend that the protocol creates an unconstitutional risk of pain and suffering because the executioner is not close enough to the condemned to identify IV problems such as infiltration. Their argument ignores the fact that the Warden and Deputy Warden are located in the execution chamber, next to the inmate, to watch for signs of infiltration. JA316-317, 337. It also ignores the undisputed evidence that signs of infiltration would be visible and obvious due to the pH and amount of the thiopental solution being administered. JA353, 386, 600-601.

d. The qualifications and training of execution personnel in administering intravenous drugs does not present a substantial risk of pain or suffering.

Petitioners also contend that the protocol creates an unconstitutional risk of pain and suffering because the IV team members do not have specific training in administering intravenous drugs or identifying or fixing IV problems such as infiltration. Petitioners' argument ignores the evidence in the record showing the experience and capabilities of the IV team members. JA273-274, 352, 384-385. The argument also ignores the undisputed evidence that signs of infiltration would be visible and obvious due to the pH and amount of the thiopental solution being administered. JA353, 386, 600-601.

As an additional safeguard against infiltration, Kentucky's lethal injection protocol requires the siting of two separate IV lines. If for any reason the inmate is not unconscious within one minute of administration of the three-gram dose of thiopental through the primary IV site, the written protocol requires that a second three-gram dose of thiopental be administered through the secondary IV site before any pancuronium or potassium is injected.

c. The lack of monitoring for anesthesia awareness does not present a substantial risk of pain or suffering.

Petitioners also contend that Kentucky's lethal injection protocol presents an unnecessary risk because it does not utilize an anesthesiologist or other qualified medical personnel to monitor for "anesthesia awareness" in the event the inmate regains consciousness during an execution after administration of the thiopental. Pet. Br. 57-59. Petitioners apparently contemplate that such monitoring would include the use of monitoring equipment "such as a BIS monitor, blood pressure cuff, EKG, and/or EEG." *Id.* at 58. Dr. Heath, petitioners' own expert, testified that BIS monitors are not even considered the "standard of care" in surgical settings. JA539.

This result is consistent with the Eighth Circuit's decision in *Taylor*, 487 F.3d 1072. The Eighth Circuit reversed a district court order that required corrections officials in Missouri to modify the State's proposed lethal injection protocol to "require a physician with training in anesthesia" and to "provide for the possibility of purchasing additional equipment to monitor anesthetic depth." *Id.* at 1078. The Eighth Circuit held that Missouri's written protocol met constitutional standards without the modifications, stating:

> We know of no decision holding that the Constitution requires a physician to become an executioner. . . . Neither does the record justify requiring the continuous monitoring of

> the anesthetic depth of the inmate by one trained in anesthesia or by additional equipment. The written protocol requires a 5-gram dose of thiopental to be delivered through a properly placed and working IV, combined with a three-minute wait and a physical confirmation of unconsciousness before the last two chemicals are administered. The experts agree that this dose, successfully delivered, . . . eliminates any need for further monitoring.

Taylor, 487 F.3d at 1084 (citations omitted).

Similarly, in *Hamilton v. Jones*, 472 F.3d 814 (10th Cir. 2007), the Tenth Circuit recently considered whether Oklahoma's lethal injection protocol violated the Eighth Amendment due to the lack of procedures or equipment for monitoring consciousness of condemneds. The Tenth Circuit upheld Oklahoma's existing lethal injection protocol, without additional monitoring procedures, even though Oklahoma's existing protocol called for the administration of only 1200 mg of thiopental, in comparison to the three gram (3,000 mg) dose required under Kentucky's lethal injection protocol. *Id.* at 816-817.

Furthermore, the Court need look no further than the cases cited by petitioners in support of their argument to see the insurmountable problems that Kentucky corrections officials would face if the Commonwealth were required to implement the monitoring requirements contemplated by petitioners. In the wake of *Morales v. Hickman*, 438

F.3d 926 (9th Cir. 2006), the California Department of Corrections was forced to suspend all executions due to the unwillingness of licensed anesthesiologists to participate in executions. In an effort to proceed with the inmate's scheduled execution, California corrections officials attempted to secure the participation of a licensed anesthesiologist in order to comply with the district court's order conditionally denying the inmate's motion for a preliminary injunction if an anesthesiologist participated in the execution. *Id.* Just before the execution, however, the two anesthesiologists who had agreed to be involved in the execution declined to participate due to disagreement as to the degree of participation being required by the district court. *See Morales v. Tilton*, 465 F. Supp. 2d 972, 976 (N.D. Cal. 2006). California corrections officials apparently attempted to purchase a BIS monitor, but the manufacturer refused to sell the machine to the state for use in executions. Deborah W. Denno, *The Lethal Injection Quandary: How Medicine Has Dismantled the Death Penalty*, 2007 Fordham L. Rev. 49, 111.

A similar situation has arisen in North Carolina in the wake of *Brown v. Beck*, No. 5:06CT3018 H, 2006 WL 3914717 (E.D.N.C. April 7, 2006). In *Brown*, North Carolina corrections officials agreed to use a BIS monitor to monitor consciousness during the execution so that the federal district court would allow them to proceed with a scheduled execution. *See Brown v. Beck*, 445 F.3d 752 (4th Cir. 2006).[19]

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[19] Since then, the manufacturer of the BIS monitor has reportedly enacted a policy that requires any state corrections department desiring to purchase a BIS monitor to sign a

Subsequently, North Carolina corrections officials have been unable to secure the participation of licensed anesthesiologists to read the monitor. North Carolina corrections officials were forced to sue the North Carolina Medical Board to prohibit the Medical Board from enforcing its position statement and from taking disciplinary action against physicians who participate in executions. *N.C. Dep't of Corr. v. N.C. Med. Bd.*, No. 07-CVS-3574, at 5 (N.C. Super. Ct. Sept. 21, 2007).

CONCLUSION

The judgment of the Kentucky Supreme Court should be affirmed.

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written contract specifying that the machine will not be used in executions. Denno, *supra*, 2007 Fordham L. Rev. at 111-112.

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Petitioners,

v.

JOHN D. REES, et al.,
Respondents.

ON WRIT OF CERTIORARI TO THE SUPREME COURT OF KENTUCKY

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REPLY BRIEF FOR PETITIONERS

By choosing to use pancuronium and potassium chloride to conduct lethal injections, Kentucky has built into its execution procedures an inherent danger of inflicting excruciating pain upon condemned prisoners. Unable to contest this proposition, respondents stake their constitutional case on the factual proposition that the danger is insignificant because their procedures ensure that prisoners will be adequately anesthetized before the paralyzing pancuronium and burning potassium chloride take effect. But the purported safeguards on which respondents rely to ensure effective delivery of adequate anesthesia consist of little more than using an EMT and phlebotomist to insert the IV at the outset of the procedure, and do not address the many deficiencies in the procedure that could lead to an agonizing death. Likewise, respondents do next to nothing to monitor whether a condemned inmate is adequately anesthetized. Their "monitoring" consists of visual observation by the warden and his deputy to determine (from several feet away) whether the inmate appears to have "gone to sleep." JA 281.

The danger of a torturous execution using these procedures is real, not hypothetical – as the history of botched executions and the experience of States using the three-drug formula confirms. *See infra* pages 15-17; Pet'r Br. 20-24. And this experience almost certainly understates the magnitude of the danger because pancuronium will mask the visible evidence that the inmate is suffering.

Rather than acknowledge the very real dangers posed by Kentucky's procedures, respondents seek to change the subject, contending that petitioners have advanced a "least risk" standard that would invalidate any execution procedure so long as a slightly less risky alternative can be posited. That is a caricature. Under petitioners' test, a condemned prisoner challenging an execution procedure must show that the procedure presents a danger of severe pain that amounts to cruelty, that the danger is unnecessary in that it can be avoided by adopting reasonably available alternatives, and that it is significant in that the danger will materialize into actual cruel executions for some inmates. Speculative or hypothetical risks, or risks of less than severe pain, do not suffice – and even significant risks of severe pain do not suffice if the risks are not reasonably avoidable. It is this standard, and not respondents' seemingly unattainable "substantial risk" standard, that best comports with fundamental Eighth Amendment principles.

Kentucky's procedures fail this test. The record establishes that a massive dose of a barbiturate would bring about death swiftly without the dangers inherent in using pancuronium or potassium. And even if Kentucky were to choose to continue with the three-drug approach despite this alternative, it could readily reduce the dangers of the three-drug approach by monitoring effectively to assure that a condemned inmate is anesthetized. The risk posed by those chemicals – a risk of excruciating pain that qualifies as cruel and unusual under any definition –

is thus plainly an unnecessary one. It is equally plain that the risk is a significant one. Botched lethal injections have occurred in the past and can be expected to occur in the future if Kentucky's haphazard procedures receive the Court's imprimatur. It cannot be any less a violation of the Eighth Amendment that these procedures will inflict excruciating pain on some rather than all inmates subjected to them.

ARGUMENT

I. Kentucky's Procedures Subject Inmates To A Significant and Unnecessary Risk Of Excruciating Pain.

A. Kentucky's Deficient and Dangerous Procedures.

The trial record establishes beyond peradventure that pancuronium and potassium will cause a torturous death if they are injected into an inadequately anesthetized inmate. Respondents' brief does not contest this fact, and instead asks this Court to uphold Kentucky's procedures on the sole ground that those procedures ensure that inmates will be adequately anesthetized before these chemicals are injected into their veins.

But respondents have failed to rebut petitioners' showing that each step in Kentucky's unwieldy process creates the danger that inadequate anesthesia will be delivered to the inmate. As petitioners established at trial, the executioners can get the dose wrong by preparing a solution with the wrong concentration of thiopental; they can err in placing catheters; they can push the drugs too hard

and "blow out" the catheter by perforating the vein; and they can inject the syringes in the wrong order. These dangers are sufficiently serious that even personnel who, unlike Kentucky's personnel, possess expertise and appropriate training would have difficulty reliably carrying out the procedure.

Respondents have likewise failed to show that they effectively verify that a condemned prisoner is sufficiently anesthetized before receiving pancuronium and potassium. To the contrary, Kentucky's procedures virtually guarantee that a failure to administer adequate anesthesia will go undetected.

Doubtless because of the dangers posed by pancuronium and potassium, Kentucky law forbids using a comparable three-drug protocol to euthanize animals and allows the use of potassium only when trained personnel can assure that anesthesia has been effectively administered. *See* Ky. Rev. Stat. § 258.095(12); AVMA Guidelines on Euthanasia, at 12 (2007). Respondents do not even attempt to justify using procedures to execute humans that are so dangerous that they would be unlawful if used to euthanize animals, and they fail to convincingly answer the record evidence establishing the proliferation of dangers created by their procedures.

1. Foreseeable Administration Problems.

Petitioners have shown that Kentucky's procedures are rife with problems that can prevent effective anesthesia. Nothing in respondents' brief

(or in the two specific trial court findings related to these dangers) refutes that showing.

Dosing Problems. To deliver a three-gram dose of thiopental into an inmate's veins effectively, the IV team must prepare a solution that will deliver the dose in the proper concentration. Doing so entails knowing how many vials of thiopental powder to combine with what quantity of diluent; how to combine multiple vials into one or two larger syringes; and how to ensure that the entire amount of powder is drawn into the syringes. If this process is not performed accurately, it will result in a concentration of thiopental that is either too low or too high – either of which would prevent delivery of a reliable dose of anesthetic. JA 433-34, 473; *Taylor v. Crawford*, No. 05-4173-CV-FJG, 2006 WL 1779035, at *4-*5 (W.D. Mo. June 26, 2006), *rev'd*, 487 F.3d 1072 (8th Cir. 2007), *cert. pending*.

Yet Kentucky's protocol says nothing about how to perform these tasks. It states only that personnel "shall prepare two (2) sets of execution chemicals in 60 cc syringes," JA 987, and it nowhere explains how many thiopental vials will be used, how they should be combined, or what concentration should be used. *Id.* 472-73, 986-89. Execution personnel apparently are expected to figure out how to create the three-gram dose for the first time on the night of an execution. *Id.* Respondents' own brief vividly confirms how easy it is to err in preparing a solution with the proper concentration. Respondents assert that "three grams of thiopental are dissolved into 20 milliliters of sterile solution." Resp. Br. 42. If that is indeed what Kentucky's executioners do, they will

be creating a far higher concentration of thiopental than can safely be used. *See* JA 677-78. At this concentration, the solution will be over-saturated and the full dose of the thiopental will not dissolve. *See generally id.* 673; *Taylor*, 2006 WL 1779035, at *4-*5. The resulting solution will then be of a dose that is substantially lower than intended. *See id.*

Improperly Placed Catheters. IV catheters can be improperly placed: they can perforate the vein, or be inserted so that they are partially or fully outside the vein. When this happens, a portion of each drug will be injected into the tissue surrounding the vein (a problem known as infiltration). JA 358, 463. Although infiltration might prevent delivery of the full dose of all three drugs, a small portion of the intended doses of pancuronium and potassium will cause paralysis, pain and death, whereas the same proportion of the intended thiopental dose may be insufficient to induce anesthesia for the duration of the execution. *See* Pet'r Br. 14 n.8, 20-21.

These problems are not hypothetical. IV problems occur regularly in clinical settings, JA 463, and are more likely in the execution context. As the trial court found, there are numerous difficulties attendant to IV insertion in an execution that increase the likelihood of an improperly placed catheter, including "failure to find a suitable I.V. site, 'blowouts,' problems with scar tissue, and problems caused by nervousness." *Id.* 762; *id.* 217.

Four aspects of Kentucky's procedures increase this danger. First, executions will proceed even when the prospect of achieving reliable catheter

placement is poor. By providing a 60-minute window for IV insertion (rather than the 20 minutes that is standard medical practice, *id.* 475), the protocol contemplates attempting IV access even though the chances of setting a reliable IV have become "exponentially lower," because the personnel have already "blow[n]" the "good veins." *Id.* 476.

Second, unqualified personnel determine which of Kentucky's two IVs to use as the primary line based on the "presence of blood" in the needle – a criterion with no medical validity that could lead to an erroneous assumption that the catheter was properly set. *Id.* 315, 466-67; Pet'r Br. 15.

Third, the use of inexperienced prison personnel (who lack even the basic qualifications of the EMT and phlebotomist) to push the drugs increases the danger that an initially reliable catheter will be "blown out" – *i.e.*, the catheter will perforate the vein, causing infiltration – by pushing too hard on the syringes. JA 217, 219-20. Because these personnel practice this task by pushing solution through tubing unconnected to a catheter, they have never confronted the problems that foreseeably arise when injecting solution into human veins.

Fourth, Kentucky's choice to deliver the chemicals remotely via five feet of IV tubing that snakes from a separate room through a wall and to the gurney in the execution chamber – a choice made solely to protect the sensibilities of the executioners – renders blowouts more likely. With longer tubing, there is greater resistance to the syringe push, so the executioner must apply more force, which, coupled

with the volume of the fluid used, increases the danger of "IV disruption." *See Harbison v. Little*, 511 F. Supp. 2d 872, 889 (M.D. Tenn. 2007) (quoting expert testimony).

Syringe Problems. Because Kentucky's procedures require an inexperienced prison employee to administer a series of syringes in quick succession under stressful conditions, administering the chemicals in the wrong order is a foreseeable danger – one that Dr. Dershwitz has acknowledged. *See Harbison*, 511 F. Supp. 2d at 888; *see also* Tr. 784 (syringe problems in clinical practice). Missouri's head executioner, describing procedures like Kentucky's, similarly testified that he was concerned about syringe problems because "the people who do the injections ... [have to] quickly identify the syringes, make the appropriate connections and injections, disconnect, clamp the tube." *Taylor*, 2006 WL 1779035, at *5. An execution in which the inmate receives the pancuronium out of order, while potentially agonizing, would appear unremarkable to execution personnel. Moreover, by failing to provide adequate monitoring and contingency procedures, respondents have made it likely that a syringe problem will go undetected and uncorrected. *See infra.*

2. Untrained Personnel Increase The Likelihood of Administration Problems.

Exacerbating these problems is the fact that the bulk of the execution tasks are performed by personnel with no relevant expertise. Aside from

setting IVs, EMTs and phlebotomists have no clinical training or experience in the other tasks the execution team must perform: mixing and calculating doses of intravenous anesthetics; administering anesthesia or drugs like pancuronium; deciding how to correct an administration failure.[1] JA 528-29, 625; *see* 202 Ky. Admin. Reg. § 7:701(2) (describing scope of practice). Moreover, the prison employee who pushes the drugs has no experience in calibrating the force of the push or detecting resistance within IV lines. *See* JA 285, 287; Pet'r Br. 17-18. In these respects, Kentucky ignores the warning provided by the manufacturer of sodium thiopental that the drug should be administered only by individuals trained and experienced in doing so. JA 528-29, 675.

Kentucky's execution personnel therefore do not have the minimal experience that respondents' expert, Dr. Dershwitz, has asserted is necessary to ensure that executions are performed properly: personnel "should be people who do this [each task] as part of their daily job and ... they should be able to troubleshoot and that only comes with experience." *Harbison*, 511 F. Supp. 2d at 879 (quoting Dershwitz). As a result, courts have found that employing personnel with only paramedic or IV-therapy qualifications as the purportedly expert

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[1] *Amicus* United States suggests that Kentucky, "like the federal government," employs qualified personnel. U.S. *Amicus* Br. 27. The recent disclosure in discovery that the United States entrusts its execution procedure to a doctor whose incompetence led to his being banned from participating in Missouri executions casts doubt on this assertion. *See* Morales *Amicus* Br. 15-16.

personnel is a "severe problem." *Harbison*, 511 F. Supp. 2d at 888; *Morales v. Tilton*, 465 F. Supp. 2d 972, 979 (N.D. Cal. 2006) (personnel with qualifications similar to Kentucky's personnel were "unprepared" for execution tasks).

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In sum, petitioners demonstrated at trial that Kentucky's complex procedures are rife with problems at each stage of the execution process – unsurprisingly, in light of Kentucky's failure to conduct any independent inquiry into the adequacy of the approach it copied from other States which had also adopted it without careful study.

Kentucky seeks to defend the ruling below by claiming that the trial court's factual findings are entitled to deference. But the court made only two specific findings pertinent to the effectiveness of Kentucky's procedures for delivering the anesthetic (regarding the mixing of individual packets of thiopental and the risk of precipitate forming in IV lines, JA 761-63). Those findings do not address the many other deficiencies in Kentucky's procedures that can lead to agonizing death. Thus, the court did not analyze the overall danger that Kentucky's procedures will result in inadequate anesthesia and severe pain.

3. Kentucky's Purported Safeguards Are Illusory.

Respondents essentially acknowledge that the injection of pancuronium and potassium into a conscious individual would produce extreme pain and that Kentucky's procedure can avoid this result

only if it assures that a condemned inmate has received a sufficient dose of thiopental to cause a surgical level of anesthesia before the pancuronium and potassium are administered. The State's entire defense of the procedure as "humane," *e.g.*, Resp. Br. 10, is based on the assertion that it assures inmates will receive an anesthetizing amount of thiopental. *E.g.*, *id.* 9, 10, 24, 43, 49-50, 55, 57. This assertion, in turn, rests solely on the claim that a series of "safeguards" assures that thiopental delivery failures cannot occur. But these "safeguards" do not come close to alleviating the dangers created by Kentucky's ill-designed protocol.

First, respondents' reliance on the participation of EMTs and phlebotomists (whose only role is to set the IV), *id.* 39, does not ensure that Kentucky's unwieldy procedure will reliably deliver anesthetic. Whatever their expertise in setting an IV line, EMTs and phlebotomists have no training or expertise in any of the remaining steps in the execution process. Thus, the warden's confidence that he could rely on them to respond to problems that arise during the procedure, *id.* 279, is entirely misplaced.

Second, the rudimentary "training" to which respondents point (Resp. Br. 39) falls woefully short. The reality is that execution personnel do not practice most of what they must do to carry out a lethal injection. They do not practice constituting a three-gram dose of thiopental at an appropriate concentration level. JA 298. Nor do they practice injecting saline solution into a human vein or use any other technique that would allow them to learn to assess IV problems that can be expected to arise

during the lethal injection process. Instead, they simply push solution through a tube unconnected to a catheter. *Id.* 318-19, 285. They do not consider or practice taking remedial steps if infiltration or any other foreseeable problem occurs during administration of thiopental. JA 191. *See Harbison*, 511 F. Supp. 2d at 891 (monthly training regimen that, in addition to the tasks practiced in Kentucky, included actual injections, was inadequate because personnel did not receive "instruction [in] the actions they are actually charged with performing"). As a result, the execution team will be performing some of the most crucial execution tasks *for the first time* on the night of the execution.

Third, respondents do virtually nothing to detect inadequate anesthesia. As the trial court found, respondents do not use available technology – such as an EKG, blood pressure cuff or BIS monitor – to gather the information necessary to assess whether the anesthesia is working. JA 764. Instead, respondents rely on the warden's visual "check" of whether the inmate appears to have "gone to sleep" within 60 seconds after being injected with thiopental. Resp. Br. 41; JA 283. But lay observation cannot distinguish among full consciousness (with eyes closed), light anesthesia caused by a partial dose of thiopental, or the surgical level of anesthesia that is necessary to safeguard against the pain of potassium. JA 349-51, 406-07, 418, 439; *Morales v. Hickman*, 415 F. Supp. 2d 1037, 1047 (N.D. Cal. 2006). The visual consciousness "check" is virtually useless. That is particularly so if, as in the Harper execution, the warden is only able

to see the inmate "from the waist down" – precluding even a rudimentary observation of consciousness. JA 213-14; 418-19, 421. In any event, these purported measures would be effective, if at all, only until pancuronium is injected. After that, no indications of consciousness will be discernible to observers. *Id.* 441.

Fourth, to detect infiltration and other IV problems, respondents rely entirely on untrained and inexperienced prison officials who stand in the execution chamber, attempting to observe subtle indicia of infiltration from obstructed positions up to ten feet away. *Id.* 183, 213, 276-77. Contrary to respondents' misstatement, the record does not demonstrate that IV problems would be "obvious" to untrained observers. Drs. Haas and Hiland – both trained medical professionals – testified that they personally would be able to detect infiltration, not that an untrained person could do so. *Id.* 353, 386. In contrast, Dr. Heath testified that the ability to palpate and closely observe – which require experience and knowledge – are necessary to detect infiltration and other problems. *Id.* 463. *See generally Harbison*, 511 F. Supp. 2d at 889 (quoting expert: "visual observation [of catheter site] by a minimally trained person is not adequate"). And although Dr. Dershwitz speculated that a thiopental infiltration might cause an inmate to complain of pain, JA 600-01, thiopental infiltration frequently does not cause pain. *See* D. Denison Davies, *Local Complications of Thiopentone Injection*, 38 Brit. J. Anaesth. 530 (1966); *cf. Lightbourne v. McCollum*, No. SC06-2391, __ So. 2d __, 2007 WL 3196533, at

*15 (Fla. Nov. 1, 2007). Therefore this is not a reliable indicator of problems. And infiltration is only one of the problems that can result in inadequate anesthetization.

For these reasons, Dr. Dershwitz has opined that "it is logical to assume that there's an increased risk" if the only personnel observing the inmate during the execution are untrained in monitoring IV lines. *Harbison*, 511 F. Supp. 2d at 888. He has also asserted that "all the steps involved in putting in and maintaining and checking an IV are best done by somebody who regularly does ... all of these steps as part of" his or her normal employment duties. *Id.* As the evidence demonstrates, Kentucky's procedures fall far below this standard. JA 268, 276, 287, 300, 340, 433-34, 441-42, 463, 525, 528-29.

Fifth, respondents state that personnel can ameliorate any IV problems, if they detect them, by using the backup IV line. Resp. Br. 41. That is not so. Even if personnel detected any problems – itself a large assumption – they will not know how to react effectively to problems they have never before encountered, and for which they have not trained. JA 279, 283; Morales *Amicus* Br. 30-35. Any backup procedure is only as effective as the people administering it. *See, e.g.*, Summary of the Findings of the Dep't of Corrections Task Force Regarding the Dec. 13, 2006 Execution of Angel Diaz, at 5-7 (Dec. 20, 2006) (personnel insufficiently trained to implement contingency procedures).

In sum, respondents' proffered safeguards are illusory, and will not ameliorate the grave risks created by their procedures.

4. Deficiencies Similar to Kentucky's Have Led To Problematic Executions.

Although respondents dismiss the dangers described above as "speculative," Resp. Br. 6-7, petitioners' expert testimony regarding problems leading to inadequate anesthesia has been borne out repeatedly.

For instance, execution personnel in California and Missouri, who, like those in Kentucky, had EMT-level training but no expertise in mixing drugs, have had difficulty constituting the proper dose of thiopental, to the point where it is impossible to know whether they prepared adequate doses. *See, e.g., Morales*, 465 F. Supp. 2d at 980 (describing dosing problems and impossibility of determining whether adequate anesthesia was given); *Taylor*, 2006 WL 1779035, at *4-*5 (surgeon had "difficulty in dissolving [thiopental] powder"). IV problems have frequently occurred and have led to botched executions. *See* JA 778; Morales Amicus Br. at 31-33; *Lightbourne*, 2007 WL 3196533, at *15-*16. In several jurisdictions, execution team members lacked the training and expertise to carry out written execution protocols accurately. *See Taylor*, 2006 WL 1779035, at *7; The Governor's Comm'n on Administration of Lethal Injection, Final Report With Findings and Recommendations, at 8-9 (2007). And when problems have arisen, execution personnel have often been inadequately trained to react

effectively. *Morales*, 465 F. Supp. 2d at 979; Morales *Amicus* Br. at 29-35.[2]

In California, for instance, where personnel had expertise and training comparable to that in Kentucky, six of eleven inmates executed by lethal injection apparently received insufficient thiopental to induce surgical levels of anesthesia. *Morales*, 465 F. Supp. 2d at 980. The execution team failed to recognize the problem before injecting pancuronium and potassium. At least one inmate displayed vital signs consistent with consciousness during the injection of the second two drugs. *Id.* at 979-81 (state's expert testified that "Massie well may have been awake when he was injected with potassium").[3] The California evidence demonstrates that because pancuronium is used, executions can be botched in a manner that is not readily evident unless execution records are examined.[4] *See id.* at 980; *see also* JA 441. In numerous other jurisdictions, inmates have

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[2] Petitioners' arguments below regarding the existence and foreseeability of these problems make the trial court's denial of the opportunity to depose Kentucky's execution personnel inexplicable. *See* Tr. 128:20-26, 134:10-135:16, 195:14-17.

[3] *Amici* States acknowledge that this evidence indicates "insufficient anesthesia," but assert it "does not establish that [inmates were] awake and experienced any pain." States *Amicus* Br. 30; *see also* U.S. *Amicus* Br. 26. Because the inmates were given pancuronium, there is no way to definitively determine whether they felt pain. But an insufficiently anesthetized prisoner given potassium is virtually certain to experience excruciating pain.

[4] It is precisely this danger that has led veterinarians to conclude that neuromuscular blockers should never be used in euthanasia. Concannon *Amicus* Br. 16-18; *Beardslee v. Woodford*, 395 F.3d 1064, 1073 (9th Cir. 2005).

exhibited more obvious signs of potentially inadequate anesthesia, *see, e.g.*, *Brown v. Beck*, No. 5:06 CT 3018, 2006 WL 3914717, at *5 (E.D.N.C. Apr. 7, 2006), yet in many cases execution personnel have not noticed or reacted to these problems. *See* Morales *Amicus* Br. 29-35.

These examples give the lie to respondents' assertion that the "safeguards" in Kentucky's execution procedure are sufficient to assure that condemned inmates will be anesthetized before pancuronium and potassium are injected, and that the execution team will detect and react to any problems that arise. Yet respondents continue to insist that these problems could never occur in Kentucky, because, they contend, no execution has yet been botched in Kentucky. Resp. Br. 6. But this is no reason to disregard the evidence marshaled in this case and the problems revealed in other jurisdictions. The absence of definitive proof of suffering in this single execution is hardly sufficient to validate Kentucky's procedure. In addition, as a result of respondents' use of pancuronium and failure to collect meaningful data, there is no evidence from which any conclusions as to the humaneness of Harper's execution can be drawn.[5] JA 441, 502-03.

B. Less Dangerous Alternative Procedures Are Reasonably Available.

Respondents do not seriously dispute that alternative procedures – execution by barbiturate, or

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[5] The lay witnesses admitted that they could make no meaningful observations of consciousness. JA 192, 213-14, 283.

the addition of effective anesthetic monitoring to the three-drug protocol (with or without eliminating pancuronium) – would be less dangerous than Kentucky's current procedures. Resp. Br. 53-54, 63-65. Instead they contend that these alternatives are not reasonably available. That objection is meritless.

1. Executing By Barbiturates Would Not Compromise Legitimate Penological Interests.

Performing lethal injection by means of a single massive dose of thiopental or another barbiturate such as pentobarbital (which is longer acting, and used by veterinarians for animal euthanasia), would obviate all of the dangers of an agonizing and excruciatingly painful death that are created by Kentucky's three-drug protocol.[6] It was undisputed below that pancuronium and potassium are not needed to cause death, JA 492, 547, because thiopental alone will cause death promptly. Tr. 656:16-18, 553:21-24.

Respondents' primary argument against the barbiturate-only formula is that it is "untested." Resp. Br. 53. Yet, the three-drug protocol was similarly "untested" when it was first adopted. JA 105-06. In all events, respondents' objections to this

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[6] Contrary to respondents' contention, petitioners argued to the trial court that an alternative "chemical or combination of chemicals" should replace Kentucky's three-drug protocol. JA 684. Evidence regarding several potential methods, including the use of thiopental or other barbiturate, was entered into the record. See Tr. 294-95, 656:16-18, 553:21-24; JA 142, 457, 492, 547. The trial court, however, held that the existence of alternative procedures was irrelevant. JA 766.

approach lack merit. Veterinarians routinely perform euthanasia by barbiturate and have concluded that it is the method "preferred" over all others because it is reliably humane and causes "cardiac arrest within a matter of minutes." Concannon *Amicus* Br. at 19; 201 Ky. Admin. Regs. 16:090 § 5(1); Ky. Rev. Stat. § 321.207(5); AVMA Guidelines on Euthanasia, at 28 (2007) (barbiturate is required method for primates). Moreover, there is ample scientific and judicial recognition that the barbiturate-only formula, properly administered, is both lethal and far less dangerous than the three-drug formula. *See Morales*, 415 F. Supp. 2d at 1047; *Morales*, 465 F. Supp. 2d at 983-84; *Harbison*, 511 F. Supp. 2d at 876, 895-96 (quoting DOC testimony that Dershwitz "recommended" the barbiturate-only formula, and recognizing it as a safer alternative).[7]

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[7] Respondents assert that the *Harbison* court's finding that Dr. Dershwitz recommended the barbiturate-only protocol is "erroneous." Resp. Br. 55. But that court credited multiple officials who testified that Dershwitz "recommended" it, 511 F. Supp. 2d at 876-77, 895, and rejected Dershwitz's contrary testimony. Moreover, after consulting with Dershwitz, the commission expressly recommended the barbiturate-only protocol to the corrections commissioner, who rejected it, in part because he did not want Tennessee to be the first State to adopt it. *See id.* at 876-79.

Ignoring the detailed findings in *Harbison*, and relying on the earlier decision in *Workman v. Bredesen*, 486 F.3d 896 (6th Cir. 2007), the United States erroneously contends that the Tennessee commission rejected the barbiturate-only approach. U.S. *Amicus* Br. 29. The *Harbison* court, after reviewing extensive evidence that was not available to the *Workman* court, concluded that the materials on which *Workman* relied gave an incomplete and "erroneous" picture of the deliberative process. 511 F. Supp. 2d at 899-900.

Respondents also assert that implementing the barbiturate-only protocol would be "infeasible" because they could not continue to use an EKG to determine death. Resp. Br. 55. That is incorrect. An EKG flatline is a measure of death that can be used regardless of the drugs administered. *See Harbison*, 511 F. Supp. 2d at 876; *Morales*, 415 F. Supp. 2d at 1047 n.16. Moreover, death can be determined through physical examination without employing a physician: paramedics are trained to determine death in this manner. Ky. Rev. Stat. § 311A.185.

Nor have respondents advanced any good reason for using pancuronium. They make almost no effort to defend its use on the ground proffered below – avoiding involuntary movements that might unsettle witnesses – because that interest is plainly insufficient to outweigh the dangers inherent in using pancuronium, JA 445, and because it can be addressed by explaining to witnesses that involuntary movements do not indicate pain. Pet'r Br. 52-53 & n.15; Concannon *Amicus* Br. 17-18; Crit. Care Phys. *Amicus* Br. at 5-6, 12. Nor can the use of pancuronium be defended on the ground that involuntary movements might dislodge the catheters. That argument ignores the trial court's finding that pancuronium lacks any therapeutic purpose. JA 763. It is also insubstantial; inmates are restrained to prevent movement, *id.* 524, 975, and involuntary movements could be avoided by using cardiotoxins other than potassium, *id.* 628. Finally, the use of pancuronium cannot be justified on the ground that it has the legitimate purpose of stopping the inmate's

breathing. *Compare* Resp. Br. 50, *with* JA 306. A three-gram dose of thiopental, if properly administered, should stop the inmate's breathing before pancuronium is injected. *See Morales*, 415 F. Supp. 2d at 1043-44.

2. Effective Assessment of Anesthetic Depth Will Not Compromise Legitimate Penological Interests.

Respondents are similarly unable to refute petitioners' showing that Kentucky could minimize the danger of continuing to use potassium in its lethal injection procedure by providing for effective assessment of anesthetic depth throughout the execution.[8] Kentucky could substantially increase the likelihood of detecting inadequate anesthesia by eliminating pancuronium, the paralytic effect of which makes monitoring far more difficult. JA 418-19, 441, 446. And even if Kentucky were to persist in using pancuronium, petitioners demonstrated at trial that there are numerous steps respondents could take to reduce the danger of inadequate anesthesia. Pet'r Br. 57-59.

Rather than defend the palpable inadequacies of Kentucky's monitoring procedures, respondents

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[8] Contrary to respondents' claims, petitioners raised this argument in the Petition for Certiorari. It is plainly subsumed within the Questions Presented – in particular, whether the "means for carrying out an execution cause an unnecessary risk of pain and suffering ... upon a showing [of] readily available alternatives that pose less risk." Pet'r Br. i. Moreover, monitoring was the subject of extensive testimony and briefing below, as well as numerous findings by the trial court. *See, e.g.*, JA 418-19, 421, 439, 597, 690-91, 764.

contend that effective monitoring requires the participation of physicians, and that such a requirement amounts to an "insurmountable problem" because physicians will not participate in executions. Resp. Br. 63-64. Respondents are incorrect that physicians are the only personnel who are capable of monitoring anesthetic depth. *See, e.g.*, *Morales*, 415 F. Supp. 2d at 1047-48 & n.18. In any event, if there is a problem, it is of the States' own making. Those courts that have ordered officials to institute anesthetic monitoring have done so only after finding significant risks in the procedures at issue, and as a means of minimizing those risks without forcing States to alter the three-drug formula or any other aspect of their procedures. *See, e.g., id.* at 1048 (giving State choice of remedies); *Taylor v. Crawford*, No. 05-4173-CV-C-FJG, at 1 (W.D. Mo. Sept. 12, 2006) (unpub'd Order) (monitoring necessary if State chose to retain three-drug formula). To the extent that difficulties recruiting physicians have affected those States' conduct of executions, that is the result of the States' decision to retain their dangerous procedures, rather than explore other remedial options such as the barbiturate-only protocol – which can be administered without the participation of physicians, and which poses no danger of a torturous death when administration problems occur.

II. Petitioners' Test Is The Correct Test.

A. Significant Risk Is The Proper Measure Under The Eighth Amendment.

In their opening brief, Petitioners explained that the Eighth Amendment prohibits procedures that cause a significant and unnecessary risk of severe pain. This is a demanding standard. It requires a challenger to show a danger of pain amounting to cruelty, that the pain is readily avoidable without compromising legitimate penological objectives, and that the risk is significant in that the challenged approach poses a real and predictable danger that some condemned inmates will suffer severe pain.

Respondents do not dispute that execution procedures can constitute cruel and unusual punishment based on the risk that they will impose severe pain. They insist, however, that the risk must be "substantial." Like the courts below, respondents never define what they mean by a "substantial risk," but they imply that a challenger must show with mathematic precision a high probability that the execution will go wrong in every individual's case. Respondents' effort to justify this demand is unavailing.[9]

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[9] The State *amici* assert that petitioners' standard and the substantial risk standard adopted by the Kentucky Supreme Court are the same. States Br. 4, 23. While petitioners are entitled to prevail under either standard, Petr. Br. 42, n.14, there are important differences between them. First, "significant" and "substantial" are not synonyms in this context. In contrast to petitioners' significant risk analysis, the lower courts' substantial risk test considered only the quantum of risk imposed by the procedures, and gave no weight to the severity

In particular, neither *Gregg v. Georgia* nor *Farmer v. Brennan* supports respondents' myopic approach. Respondents invoke *Gregg*'s statement that courts "may not require the legislature to select the least severe penalty possible so long as the penalty selected is not cruelly inhumane," Resp. Br. 29 (quoting *Gregg v. Georgia*, 428 U.S. 153, 175 (1976)), but that statement is inapposite. Respondents do not that deny the pain that an inadequately anesthetized inmate will suffer if injected with pancuronium and potassium is "cruelly inhumane." There is thus no basis for "deference" to a State's choice to risk imposing that level of pain. Rather, the question is whether the danger that a condemned inmate should suffer that pain is sufficiently great to require the State to avoid it by adopting readily available alternatives. *Gregg* does

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of the pain or the availability of alternatives. Pet'r Br. 42. Where, as here, the pain in question is severe, and other alternatives are readily available, petitioners should only need to show a significant risk. *Id.* "Significant" refers to a risk that is merely "important." XV *Oxford English Dictionary* 458 (2d ed. Oxford University Press 1989). "Substantial" connotes "considerable," and indicates a higher degree of risk. XVII *Oxford English Dictionary* 67.

Second, the fact that the Kentucky courts stated that the procedure could not cause "unnecessary pain " does not mean that they applied petitioners' unnecessary *risk* test. That conclusionary statement simply begged the question of what degree of risk is acceptable before the pain that it portends can be deemed unnecessary. The Kentucky courts erred in requiring a substantial, rather than a significant, risk.

not prescribe a standard for determining when that threshold has been met.[10]

Farmer is also inapposite. *Farmer* expressly did not decide "[a]t what point a risk ... becomes sufficiently substantial" to constitute a violation. *Farmer v. Brennan*, 511 U.S. 825, 834 n.3 (1994). Moreover, precisely because it was a prison conditions case in which the principal question was whether the challenged practice should be considered punishment at all, *Farmer*'s "substantial risk" requirement was part and parcel of the Court's effort to define a standard that limited challenges to practices that were sufficiently severe in their effects that it was legitimate to consider them "punishment." Where – as here – there is no question that the state action is punishment – carrying out an execution – no higher showing of risk is necessary to trigger the Constitution's protection.

Lacking support in precedent, respondents raise the specter of endless litigation challenging every refinement in lethal injection procedures. In doing so, however, they are forced to attack a straw man – claiming incorrectly that petitioners' test would result in Eighth Amendment violations predicated on "all" "insignificant" risks, "no matter how small and

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[10] Respondents also latch on to *Gregg*'s passing reference to "substantial risk" to claim the Eighth Amendment permits unnecessary risks. Resp. Br. 17. But the Eighth Amendment has been repeatedly read as prohibiting unnecessary pain in a line of cases – including *Gregg* – extending back to the 19th Century. Pet'r Br. 30-34. *Gregg* itself states directly that "punishment *must not involve the unnecessary* and wanton infliction of pain." *Gregg*, 428 U.S. at 173, 188.

remote." Resp. Br. 28-30. Petitioners' opening brief stated clearly that a challenger must demonstrate a risk that is both *unnecessary* in that it is readily avoidable, and *significant* in that it is sufficiently likely to occur such that it is worth undertaking to avoid. Pet'r Br. 39-40. Claims alleging insignificant risks – or even significant risks for which no reasonable means of correction exist – are not cognizable under petitioners' test. Far from requiring the States to respond to every risk, no matter how minor or irremediable, petitioners' test is tailored to the risks that matter most: the ones that are significant, avoidable, and of grave consequence. Once the constitutionality of a jurisdiction's procedures has been adjudicated, that determination will resolve in a straightforward manner claims brought by subsequent, similarly situated litigants; and, a State can immunize itself from future challenges if it chooses to "eliminate any constitutional concerns" by adopting execution procedures that do not entail the potential for unconstitutional pain. *Morales*, 465 F. Supp. 2d at 983. To the extent that States adopt a barbiturate-only approach, for example, it is difficult to envision future Eighth Amendment challenges because administration problems would not result in the infliction of pain.

Finally, the significant risk test is highly deferential to penological prerogatives because it allows the States to choose any means of execution so long as it does not involve significant unnecessary risks. Pet'r Br. 40. One State might choose to carry out executions using only a large dose of barbiturate.

Another might use the three-drug formula in conjunction with effective anesthetic monitoring techniques that can discern consciousness in paralyzed individuals. Pet'r Br. 57-59; JA 439-40. Yet another might eliminate the use of pancuronium (as New Jersey did), which would both reduce the risk of undetected drug delivery failures, and permit effective anesthetic monitoring by a greater universe of personnel. JA 426-27, 441, 509-10, 594, 596-600.[11]

B. Deliberative Indifference Has No Place In A Method Of Execution Challenge.

The United States asks this Court to hold that risk – no matter how serious – is not enough to show a violation unless there is also deliberate indifference on the part of the executioners. The argument fails.

First, deliberate indifference has always been limited to "conditions of confinement" cases. In a typical prison conditions case, a showing of intent is necessary to establish that the conduct in question is punishment. The "guard who accidentally stepped on a prisoner's toe and broke it" cannot be said to have carried out a "punishment." *Wilson v. Seiter*,

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[11] Moreover, the evidentiary burden even under the "unnecessary risk" standard urged by petitioners has served as a high bar to obtaining last minute stays because plaintiffs have been unable to carry their burden without discovery. *See, e.g., Cooper v. Rimmer*, 379 F.3d 1029, 1033 (9th Cir. 2004). And to the extent that inmates do attempt to use lethal injection claims to delay their executions, courts are amply equipped with equitable powers to "protect States from dilatory or speculative suits." *Hill v. McDonough*, 126 S. Ct. 2096, 2103 (2006).

501 U.S. 294, 300 (1991) (quotation marks omitted). But no showing of deliberate indifference is needed to establish that a lethal injection is punishment.

Second, a deliberate indifference requirement cannot be gleaned from the Court's statement in *Gregg* that the Eighth Amendment bars the "unnecessary and wanton infliction of pain." *Gregg*, 428 U.S. at 173. The wantonness requirement is satisfied here (as it was in *Gregg*) by the arbitrary administration of the punishment of death that risks subjecting some condemned inmates to an unconstitutional punishment. *Id.* at 188.

Third, the deliberate indifference doctrine would be a highly ineffective gatekeeper in the context of method-of-execution claims. Where a court finds there is an objective risk sufficient to violate the Eighth Amendment, it would be bizarre to hold that the execution could nonetheless go forward because the State was unaware of the risk at the time the suit was brought. The litigation itself would put the State on clear notice going forward. *Farmer*, 511 U.S. at 846-47 (officials' attitudes during litigation may be relevant to eligibility for relief).

Finally, even if this Court were to find that deliberate indifference must be shown, the record demonstrates that indifference. Putting aside the fact that respondents were aware of the dangers when Kentucky's protocol was adopted, Pet'r Br. 9 (citing Leg. Research Committee Report), they would unquestionably be deliberately indifferent if they continued to use the current protocol despite the

dangers documented at trial. *See Farmer*, 511 U.S. at 846.

C. The National Consensus Favors Petitioners' Standard.

The adoption of lethal injection by the States reflects a consensus that prisoners should undergo an anesthetized death. Pet'r Br. 39. To the extent deficiencies in Kentucky's procedures and personnel create a significant and unnecessary risk that petitioners will suffer severe pain, Kentucky's procedures are neither part of a national consensus, nor consonant with "evolving standards of decency."

The *amici* States respond that the relevant "consensus" for purposes of Eighth Amendment analysis is the administrative choice of the States to implement lethal injections by means of the three-drug formula, and that there is a consensus in favor of accepting the dangers this approach entails. This argument fails at every level. It is false to say that "State Houses across the country" have endorsed the three-drug formula. States Br. 15, 17. Most States (23 including Kentucky) have not legislated even the *categories* of chemicals to be used for lethal injections. No statute requires the use of pancuronium and potassium, much less specifies the administration procedures that exacerbate the danger created by the three-drug formula. Resp. Br. 4 & n.4. Instead, the details of the execution procedures are typically delegated to State corrections departments, which develop their protocols in secret and do not necessarily commit them to writing. *See, e.g.*, ACLU *Amicus* Br. 14-18;

Taylor v. Crawford, 487 F.3d 1072, 1077-78 (8th Cir. 2007), *cert. pending*.

Moreover, the dangers created by the three-drug formula can hardly be said to be ones that "society chooses to tolerate." U.S. Br. at 25. As the trial court found, Kentucky – like virtually every other State – adopted the three-drug formula without analyzing its dangers. JA 760.

The three-drug formula and Kentucky's administration procedures thus do not reflect any consensus that is relevant under the Court's precedents. Rather, they contravene the legislative consensus because they undermine the very purpose of the States' adoption of lethal injection in the first place. *See Atkins v. Virginia*, 536 U.S. 304, 314 (2002) (assessing number of legislatures that had enacted laws prohibiting execution of the mentally retarded); *Roper v. Simmons*, 543 U.S. 543, 565-66 (2005) (conducting same analysis regarding "legislation" prohibiting execution of juveniles).

CONCLUSION

For the foregoing reasons, the judgment of the Kentucky Supreme Court should be reversed or, in the alternative, the case remanded for further proceedings.

Respectfully submitted,

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December 28, 2007

SUPPLEMENTAL BRIEF

No. 07-5439

IN THE
SUPREME COURT OF THE UNITED STATES

RALPH BAZE, ET AL.,

Petitioner

v.

JOHN D. REES, ET AL.,

Respondent

ON PETITION FOR A WRIT OF CERTIORARI TO THE SUPREME COURT OF KENTUCKY

PETITIONERS' SUPPLEMENTAL REPLY TO BRIEF IN OPPOSITION

CAPITAL CASE

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September 6, 2007

Petitioners file this supplemental reply to bring to the Court's attention statements Respondents have made in other lethal injection cases that undermine their argument in the Brief in Opposition and that will likely aid this Court in deciding whether to grant certiorari.

In their Brief in Opposition, Respondents argue that the issues presented in this case are insignificant for two reasons: 1) there is no split among the courts about the standard for determining whether a method of execution is cruel and unusual punishment; and, 2) the different words use by the various court to describe the legal standard, such as "unnecessary," "undue," "unacceptable," "significant," etc., essentially mean the same thing and will have the same result in all lethal injection cases. Indeed, on page six of Respondents' Brief in Opposition, Respondent says "the Petitioners are mistaken in their assertions that courts are reaching disparate results in determining the constitutionality of lethal injection protocols across the nation, or that clarification is needed to assist courts in ascertaining the applicable legal standards." While espousing this viewpoint to this Court, Respondents have argued the complete opposite in pleadings recently filed in the Kentucky Supreme Court.

In the two pleadings attached to this supplemental reply, Respondents argued that there is a significant difference between "undue risk of excessive pain," "unnecessary risk of unconstitutional pain or suffering," "unacceptable and unnecessary risk of pain" on one and, and "substantial risk of pain" on the other hand. Indeed, Respondents see this difference as so significant that they strenuously urged the Kentucky Supreme Court to disregard the standard discussed in detail in the petition for a writ of certiorari that is applied in the Ninth Circuit Court of Appeals and to find California's execution procedures unconstitutional. They also see the difference as so significant that they have asked the Kentucky Supreme Court to strike any

pleadings referencing that standard. The position Respondents have taken in those pleadings is clearly inconsistent with the position they argue before this Court.

Respondents' latest argument, in state court, establishes that the parties are now seemingly in agreement on three things that are presented in the petition for a writ of certiorari: 1) there is a split among the lower courts about the proper legal standard to apply in determining whether an aspect of a method of execution violates the Eighth Amendment cruel and unusual punishment clause; 2) the difference between the legal standards can be (and seemingly is) the difference between prevailing and not prevailing; and, 3) this case presents an important issue of federal constitutional law that this Court should resolve. Thus, the arguments Respondents have presented in recent pleadings in state court not only contradict their Brief in Opposition to the Petition for a Writ of Certiorari, but also underscore why this case should be one of the few cases that the Court decides this coming term.

CONCLUSION

For the reasons stated above, Petitioners request that the Court consider this supplemental reply and its attachments when deciding whether to grant the petition for a writ of certiorari, and that, in light of the argument presented herein as well as those stated in the main petition, the Court grant the Petition for a Writ of Certiorari to review the judgment of the Kentucky Supreme Court.

Dated: September 6, 2007.

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SUPPLEMENTAL BRIEF

No. 07-5439

IN THE

SUPREME COURT OF THE UNITED STATES

RALPH BAZE, ET AL.,

Petitioners

v.

JOHN D. REES, ET AL.,

Respondents

ON PETITION FOR A WRIT OF CERTIORARI TO THE SUPREME COURT OF KENTUCKY

SUPPLEMENTAL BRIEF TO PETITION FOR A WRIT OF CERTIORARI TO BRING TO THE COURT'S ATTENTION THE PETITION FOR A WRIT OF CERTIORARI JUST FILED IN *TAYLOR V. CRAWFORD* THAT FURTHER EXEMPLIFIES THE SPLIT AMONG THE LOWER COURTS

CAPITAL CASE

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September 7, 2007

Petitioners file this supplemental brief to bring to the Court's attention the petition for a writ of certiorari filed on September 5, 2007, in *Taylor v. Crawford* (attached).

ARGUMENT

That petition also asks this Court to resolve the split among the lower courts over the legal standard applicable to Eighth Amendment challenges to particular methods of execution. By doing so, *Taylor* further exemplifies that a split among the lower courts exists and that it is important for the Court to resolve the split now before a wealth of certiorari petitions arrive at the Court. Indeed, the fact that two petitions for a writ of certiorari arguing that the Court should resolve the split concerning the applicable Eighth Amendment standard arrived before the Court within a month of each other evinces the magnitude of the issue. That these two courts, as have so many other courts in the country, applied vastly different legal standards demonstrates how divided are the courts across the country when it comes to figuring out the appropriate legal standard. Petitioners submit that the filing of the petition for a writ of certiorari is further support of the need for the Court to resolve the circuit split. At a minimum, the Court should hold the petition for a writ of certiorari in this case to consider it alongside the petition in *Taylor*.

In Petitioners' certiorari petition, they argue that both the circuit courts of appeals and the state high courts are sharply divided on the applicable standard for determining whether a particular aspect of a method of execution is cruel and unusual punishment. As pointed out in the petition, at one end are courts such as those in the Ninth Circuit jurisdictions that apply an "unnecessary" or "unreasonable" risk of pain standard, somewhere in the middle is Kentucky with its "substantial risk" standard, at the total

other end are courts that require some level of risk of pain along with deliberate indifference. These standards are different, require a different burden of proof, and can result in a different outcome. This is made clear not only in the instant petition for a writ of certiorari but also in Taylor's petition, which cites this case as an example of the different standard and the split among the courts.

Taylor arrives at the Court under the deliberate indifference standard. Together, *Taylor* and this case provide the Court with two totally different and incompatible standards - - deliberate indifference versus "substantial risk." And, as articulated in the instant petition for a writ of certiorari, this is only the tip of the iceberg. Numerous other standards are being applied by courts across the country and as those cases proceed through the judicial system, more petitions for a writ of certiorari to resolve this split will arrive at the Court. The time to resolve this issue is now and the instant case and *Taylor* are the cases in which to do it.

The instant case was the first case in the country concerning the chemicals and procedures used in lethal injections to be resolved on the merits based on a fully developed record at a trial. *Taylor* is the second. Many more will come, but these cases provide all the information necessary to resolve the legal issue without any procedural hurdle getting in the way, and it would be a great waste of judicial resources to allow courts to continue applying vastly different, and perhaps erroneous legal standards to resolve an issue that the Court knows to be time consuming and complex. Thus, the Court should use the instant case and *Taylor* to resolve the split among the lower courts and to clarify the appropriate Eighth Amendment standard to apply to a claim that an aspect of a method of execution is cruel and unusual punishment.

CONCLUSION

Based on the additional development of the filing of the petition for a writ of certiorari in *Taylor* along with the reasons expressed in the instant petition for a writ of certiorari, Petitioners respectfully urge the Court to grant certiorari. In the alternative, Petitioners request that the Court hold this case and decide it in conjunction with the petition for a writ of certiorari in *Taylor v. Crawford.*

Respectfully submitted,

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September 7, 2007

AMICUS CURIAE BRIEF

No. 07-5439

In The

Supreme Court of the United States

RALPH BAZE and **THOMAS C. BOWLING**,
Petitioners,

v.

JONATHAN D. REES, *et al.*,
Respondents.

On Writ of Certiorari to the Supreme Court of Kentucky

BRIEF OF THE AMERICAN ASSOCIATION OF JEWISH LAWYERS AND JURISTS ("AAJLJ") AS AMICUS CURIAE IN SUPPORT OF PETITIONERS

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Exodus 17:4 4

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Leviticus 20:14 4

Leviticus 21:9 4

Numbers 14:10 4

TABLE OF AUTHORITIES

TALMUDIC SOURCES *Page(s)*

Talmud Bavi: *Kesubos* 37b 11

Talmud Bavli: *Makkos* 7a 5

Talmud Bavli: *Pesachim* 75a 11

Talmud Bavli: *Sanhedrin*.....*passim*

RABBINIC SOURCES

Maimonides, *Mishneh Torah,*
Book of Judges, Sanhedrin..... 6, 11

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Book of Mitzvot 14

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Sifra on Leviticus, Kedoshim 4:12 14

Sifra on Leviticus, Kedoshim 7:9 12

OTHER AUTHORITIES

Encyclopedia Judaica,
Second Edition, vol. 4, p. 446 (2007)..... 12

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OTHER AUTHORITIES (continued) *Page(s)*

Menachem Elon, *Jewish Law: History, Sources, Principles,* (Bernard Auerbach and Melvin J. Sykes trans., Jewish Publication Society, Philadelphia) (1994) 13

Shlomo Slonim, "Federalist No. 78 and Brutus' Neglected Thesis on Judicial Supremacy," 23 Constitutional Commentary 7 (2006) 16

Speech of Attorney General Edwin Meese III before The American Bar Association, reprinted in Originalism: A Quarter-Century of Debate 52 (Regnery Publishing 2007) 15

IN THE

Supreme Court of the United States

No. 07-5439

RALPH BAZE and **THOMAS C. BOWLING**,
Petitioners,

v.

JONATHAN D. REES, *et al.*,
Respondents.

BRIEF OF THE AMERICAN ASSOCIATION OF JEWISH LAWYERS AND JURISTS ("AAJLJ") AS AMICUS CURIAE IN SUPPORT OF PETITIONERS

INTEREST OF THE AMICUS CURIAE[1]

The American Association of Jewish Lawyers and Jurists ("AAJLJ") is a membership organization affiliated with the International Association of Jewish Lawyers and Jurists ("IAJLJ"), which was formed in 1969 in Jerusalem at the first International Congress of Jewish Lawyers and Jurists at the suggestion of Israeli Supreme Court

[1] No party or party's counsel authored this brief in whole or in part, and no person or entity other than the *amicus curiae*, its members, or its counsel, have made a monetary contribution to the preparation or submission of this brief. See Rule 37.6.

Justice Haim H. Cohn, former Justice and United Nations Ambassador Arthur J. Goldberg, and jurist and Nobel Prize Laureate René Cassin. Justice Goldberg was then elected president.

The AAJLJ represents the American Jewish legal community in defending Jewish interests and human rights in the United States and abroad. The AAJLJ also promotes the study of, and respect for, principles of Jewish Law as they have been applied throughout the history of the Jewish people. The AAJLJ has sponsored public lectures in Jewish Law and promoted the publication of scholarly essays in the field of Jewish Law.

The AAJLJ submits this *amicus curiae* brief to advise the Court how questions concerning the mode of execution were resolved in the oldest comprehensive legal system known to man that continues to be studied actively to this day. In December 1999, the predecessor to this *amicus* -- the American Section of the IAJLJ -- joined in an *amicus curiae* brief addressing issues relating to the method used for capital punishment in Florida. The brief was filed in *Bryan v. Moore*, No. 99-6723. After certiorari was granted (528 U.S. 960 (1999)), this Court dismissed the writ as improvidently granted because of a representation by the Attorney General of Florida. *Bryan v. Moore*, 528 U.S. 1133 (2000).

The Jewish legal system -- based on Biblical text, oral tradition, and rabbinic interpretation -- considered and discussed the implementation of the death penalty in substantial detail. At first blush, the means prescribed by Jewish Law for the

execution of an individual who is condemned to death by a duly authorized court seem cruel and insensitive to the pain that accompanies the death of the condemned. But a close examination of the rabbinic interpretation of the Biblical text discloses that approximately 2000 years ago the rabbis of the Talmud agreed that notwithstanding the apparent literal meaning of the Biblical text, execution must be carried out as painlessly as possible. The relevant passages from the Talmud demonstrate that the rabbis sought -- with the scientific knowledge and means available to them in their time -- to formulate the quickest, least painful, and least disfiguring methods of execution that the technology of the day would allow within the framework of Biblical texts.

This *amicus* brief supports the proposition that any method of administering capital punishment that fails the contemporary standards of rapid and painless death is unacceptable. The rabbis of the Talmud ruled that execution by a court must satisfy the Biblical rule, enshrined in *Leviticus* 19:18, "Love your neighbor as yourself." Accordingly, they prohibited methods of capital punishment that did not qualify in their own time as the most humane and painless. These principles should be applied by this Court to evaluate whether execution by lethal injection, as administered in Kentucky, results in an unnecessary risk of pain and suffering. If it does, that means of execution should be barred as "cruel and unusual."

The attitude towards the means of execution in a legal system that is more than 2000 years old and that was known to the Framers of the

Constitution and to the draftsmen of the Eighth Amendment is, we submit, highly relevant to a contemporary evaluation of capital punishment. Whether one utilizes an "originalist" approach in construing the language of the Eighth Amendment or whether one interprets the constitutional text according to "evolving standards of decency" informed by changing American and international standards of morality, the teachings of the system of Jewish Law are instructive in determining whether a particular method of execution is "cruel and unusual."

ARGUMENT

Introduction and Summary of Argument

Capital punishment is a penalty prescribed by Biblical law for the commission of offenses that violate ritual prohibitions (such as deliberate desecration of the Sabbath) as well as laws regarding interpersonal relationships (murder, kidnapping, incest). The Biblical text explicitly specifies two forms of execution: stoning (*Exodus* 17:4, 8:22; *Numbers* 14:10) and burning (*Leviticus* 20:14, 21:9). The oral tradition adds two more means not explicitly enumerated in the Biblical text -- strangulation and decapitation.

Although the Biblical text appears to contemplate frequent imposition of capital punishment, the weight of authority among rabbis of the Mishnaic period (1st-3rd centuries of the Common Era), who first committed to writing what had theretofore been transmitted from generation to

generation as the Oral Law, clearly condemned frequent executions. The Mishna[2] in the tractate *Makkos* (folio 7a) declared:

> A Sanhedrin[3] that executes once in seven years is called a destroyer. Rabbi Eliezar ben Azariah says, "Even once in seventy years." Rabbi Tarfon and Rabbi Akiva say, "Had we been on a Sanhedrin at a time when they still performed executions, no person would ever have been executed." Rabbi Shimon ben Gamliel says, "They too would have increased the number of murderers in Israel, because they would have eliminated the criminals' fear of retribution."

This exchange among rabbis living in the first and second centuries reflects differences over the deterrent value of capital punishment that continue among legal scholars to this day. Some rabbis of the Mishnaic period (such as Rabbis Tarfon and Akiva)

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[2] The "Mishna" is "the collection of mostly halachic Jewish traditions compiled about A.D. 200 and made the basic part of the Talmud." Merriam Websters' Collegiate Dictionary (10th ed. 1993). The Talmud, which was compiled in the Fifth Century, is the authoritative body of Jewish tradition and is comprised of the "Mishna" and the "Gemara."

[3] The Sanhedrin was the "supreme legislative council and highest ecclesiastical and secular tribunal of the Jews, consisting of 71 members and exercising its greatest authority from the Fifth Century B.C. to A.D. 70." Webster's Encyclopedic Unabridged Dictionary of the English Language (1989).

were unwilling to participate in a process that would take human life, while other rabbis (like Rabbi Shimon ben Gamliel) believed that capital punishment had a significant deterrent effect.

The infrequency of the death penalty was attributable to the meticulous application of stringent rules regarding the admissibility and sufficiency of evidence. A court of at least twenty-three judges would have to be satisfied, to a legal certainty, that the capital offense had been committed before the court could impose a death sentence. Since the testimony of two eye-witnesses was required, and the witnesses were subjected to searching and detailed interrogation by the court, there was rarely an instance when the evidence met the prescribed legal standard. See Maimonides, *Mishneh Torah*, Book of Judges, Sanhedrin, chapter XII.[4]

By Talmudic prescription and the rulings of Jewish-Law codifiers including Maimonides, the particular form of execution to be administered under Jewish Law depended upon the nature of the offense. This *amicus* brief does not address the question of whether all capital punishment should today be rejected as "cruel and unusual" punishment. That question is not before the Court in

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[4] Rabbi Moses ben Maimon (also known as "Maimonides") (1135-1204) was a rabbinic authority and leading early codifier of Jewish Law. His 14-volume work, called *Mishneh Torah*, is viewed as an early enduring codification of Jewish Law.

this case. Our brief addresses only two of the Questions Presented that are before the Court in this case. [5]

For reasons stated in this brief, we submit that it was not sufficient under Jewish Law if a method of execution merely avoided "a substantial risk of the wanton infliction of pain." If the method created "an unnecessary risk of pain and suffering" that could be avoided by "available alternatives that pose less risk of pain and suffering," Jewish Law required use of the less painful method.

In prescribing methods for imposition of the death penalty almost two millennia ago, the rabbis of the Talmud were concerned about the same factors that have emerged from this Court's Eighth Amendment jurisprudence. Primary concerns under Talmudic law are (1) the prevention of unnecessary pain and (2) avoidance of mutilation or dismemberment of the body. The four means of execution described in the Talmud were designed to utilize the most effective technology and scientific

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[5] The first two Questions Presented pursuant to this Court's Order of October 3, 2007, are:

1. Does the Eighth Amendment to the United States Constitution prohibit means for carrying out a method of execution that create an unnecessary risk of pain and suffering as opposed to only a substantial risk of the wanton infliction of pain?

2. Do the means for carrying out an execution cause an unnecessary risk of pain and suffering in violation of the Eighth Amendment upon a showing that readily available alternatives that pose less risk of pain and suffering could be used?

knowledge available at the time to minimize the pain of the person who was being put to death and to avoid mutilation of his or her body.

I.

THE TALMUDIC STANDARD GOVERNING EXECUTION IS TO TREAT THE CONDEMNED CRIMINAL AS HUMANELY AS ONE WOULD TREAT ONESELF

A casual reader of the Biblical text might assume that the execution described as "stoning" is carried out by hurling stones at the condemned individual until he dies from the force of the objects thrown at him and that "burning" is accomplished by subjecting the condemned to a burning flame after tying the condemned to a stake or casting him or her on a funeral pyre. The oral tradition, however, as explicated by the rabbis of the Talmud, demonstrates that neither of these common misconceptions is accurate

The Mishna in the Talmudic tractate *Sanhedrin* describes execution by "stoning." The condemned defendant was pushed from a platform set high enough above a stone floor that his fall would result in instantaneous death. The Talmud then explains that the height from which the accused was pushed was substantial enough that

death was virtually certain. The Talmud explains (folio 45a): [6]

> It is because Rav Nachman said in the name of Rabbah bar Avuhah: "The verse states: 'You shall love your fellow as yourself,' which implies: If your fellow has been condemned to die, you shall choose for him a favorable death." Thus, since a fall from a higher elevation will kill the condemned more quickly and with less pain, the Mishnah ordained that the precipice be higher than the minimum necessary to cause death.

A later Mishna in *Sanhedrin* (folio 52a) describes the procedure for "burning." Notwithstanding the literal definition of the word, that means of execution did not involve actual resort to fire or flames. In explaining why the condemned was not actually burned, the Talmud repeats the formulation it invoked with regard to "stoning":

> Rav Nachman said in the name of Rabbah bar Avuha: Scripture states: "And you shall love your fellow as yourself." Choose for him a favorable death.

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[6] Translations of Talmudic passages in this brief are taken from the 72-volume edition of "Talmud Bavli: The Gemara," published by Mesorah Publications, Ltd., which explicates the literal text.

Indeed, the Mishna at *Sanhedrin* (folio 52a) concludes with a very revealing passage that condemns any court that would put an accused to death with actual flames:

> Rabbi Elazar ben Rabbi Tzadok said "An incident once occurred with the daughter of a Kohen that committed adultery and they surrounded her with bundles of branches and burned her. Apparently *this* is the proper procedure for burning." They said to him: "That was because the court at that time was not expert."

The Talmud (*Sanhedrin* folio 52b) explains that the incident reported in the Mishna was the work of a court of Sadducees (*i.e.*, those who mistakenly applied the Biblical text without taking account of the oral tradition and rabbinic interpretation). This passage demonstrates once again that notwithstanding the literal text the rabbis' primary concern was that the method of execution not cause unnecessary pain or disfigurement of the body.

With respect to decapitation as well, the Talmud in *Sanhedrin* (folio 52b) rejects one form of such execution that would be painful on the ground that the Scriptural command to "love your fellow as yourself" requires the imposition of a "favorable death." Other Talmudic tractates contain similar rules regarding execution, all based on the same Biblical command found in *Leviticus*. In *Pesachim* (folio 75a), the Talmud discusses the fact that

"burning" was carried out with the ingestion of hot molten lead and not with fire or with the ingestion or immersion in boiling water. In explaining this choice, the Talmud says:

> It is because of a dictum of Rav Nachman. For Rav Nachman said: Scripture states: "And you shall love your fellow as yourself." Choose for him a favorable death.

This Talmudic passage is explained as follows by a modern commentary ("Talmud Bavli: Tractate Pesachim," p. 75a(3), n. 24, Mesorah Publications, Ltd. (1997)):

> The obligation to love one's neighbor as oneself dictates that just as, if given the choice, one would opt for the kindest death for himself, so too one must choose this death for his fellow. Death by means of molten lead poured down the throat is less agonizing than by means of immersion in boiling water.

In Tractate *Kesubos* (folio 37b), the Talmud discusses death by decapitation and similarly concludes that the least painful and quickest method of decapitation must be used because of the Scriptural command to "love your fellow as yourself." The same principle governed the rules of execution by strangulation. Maimonides' Code prescribed that pain was to be minimized by placing a firm cloth within a soft cloth. Maimonides, *Mishneh Torah*, Book of Judges, Sanhedrin, chapter XV, para. 5.

In his authoritative discussion of "Capital Punishment" for the *Encyclopedia Judaica*, the late Israeli Supreme Court Justice Haim H. Cohn, summarized the Talmudic principles as follows (4 *Encyclopedia Judaica* 446 (2d ed. 2007)):

> In no area can the genius of the Talmudic law reformers better be demonstrated than in that of capital punishment. Two general theories were propounded which, though dated from a period too late to have ever stood the test of practical application . . ., reflect old traditions and well-established ways of thinking: namely, first, that "love your neighbor as yourself" (Lev. 19:18) was to be interpreted as applying even to the condemned criminal -- you love him by giving him the most humane ("the most beautiful") death possible (Sanh. 45a, 52a; Pes. 75a; Ket. 37a); secondly, that judicial execution should resemble the taking of life by God: as the body remains externally unchanged when God takes the life, so in judicial executions the body should not be destroyed or mutilated (Sanh. 52a; Sifra 7:9).

Similar conclusions were expressed by Professor Menachem Elon, formerly Deputy President of the Supreme Court of Israel and recognized as the world's foremost modern legal authority on "*Mishpat Ivri*" -- legal principles

derived from traditional Jewish Law.[7] In *Zuckerman v. State of Israel*, 40(iv) P.D. 209, 211 (1986), Justice Elon said:

> [T]he cardinal principle in the Torah "and you shall love your neighbor as yourself" (Lev. 19:18) was also applied by the Sages to convicted criminals. Care must be taken not to disgrace a criminal sentenced to death, and his execution must be carried out in a dignified fashion (*Sanhedrin* 45a). The fundamental rule in Jewish penal theory is that "once punishment has been administered, the offender becomes one of your brethren" [citations omitted]. All this must be taken into account when considering the degree of punishment imposed upon the criminal.

The same governing principles were articulated by Justice Elon in *State of Israel v. Tamir*, 37(iii) P.D. 201 (1983):

> Jewish Law was particularly insistent on the preservation of even a criminal's rights and dignity during the course of punishment. . . . According to Jewish

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[7] Professor Elon's comprehensive treatise *Ha-Mishpat Ha-Ivri* was initially published in Israel in 1973 (before he was appointed to Israel's Supreme Court) and re-published in 1978 and 1988. It is now available in a four-volume English translation. Elon, *Jewish Law: History, Sources, Principles*, translation by Bernard Auerbach & Melvin J. Sykes (Jewish Publication Society 1994).

> law, a death sentence must be carried out with the minimum of suffering and without offense to human dignity. This is based on the Biblical verse, "Love your fellow as yourself," and the rule is, "Choose for him a humane death." From this we declare that even a condemned felon is your "fellow."

The overriding importance in Jewish Law of the Biblical verse in *Leviticus* that governs the permissible method of capital punishment ("love your fellow as yourself") is demonstrated by the observation of Rabbi Akiva that "It is a great principle in the Torah." *Sifra on Leviticus, Kedoshim* 4:12, quoted in Commentary of Rashi. It is Affirmative Obligation 206 in Maimonides *Book of Mitzvot*. See *Sefer Ha-Chinuch, Leviticus*, para. 243 ("many commandments in the Torah depend on it").

II.

THE PRINCIPLES OF JEWISH LAW ARE INSTRUCTIVE IN APPLYING THE LANGUAGE OF THE EIGHTH AMENDMENT

We have described the governing principles of Jewish Law because we believe that the standards applied in this venerable legal system inform the meaning of the Eighth Amendment's prohibition against "cruel and unusual punishment." In considering, as a majority of this Court did in *Roper v. Simmons*, 543 U.S. 551, 561 (2005), "evolving standards of decency that mark the progress of a maturing society," this Court enumerated "history, tradition, and precedent" as relevant components in its analysis. The system of Jewish Law is unquestionably part of the history and tradition that should be weighed in arriving at the meaning of the constitutional terms in our contemporary society.

Because the Framers of the Constitution were aware in 1790 of the historic legal systems that had existed prior to their time, the lessons to be learned from them should be instructive also to "originalists" -- *i.e.*, those who apply a "jurisprudence of original intention." See Speech of Attorney General Edwin Meese III before the American Bar Association, reprinted in Originalism: A Quarter-Century of Debate 52 (Regnery Publishing 2007). See also *id.* at 326. By the standard of the plurality opinion in *Stanford v. Kentucky*, 492 U.S. 361, 378 (1989), the lesson to be derived from the Jewish Law texts regarding capital punishment is that a civilized

society had "set its face" against a method of execution that involves an unnecessary risk of pain when, in the view of those administering the system of justice, there is a readily available alternative that poses less risk of pain and suffering.

In advocating for the independence of the judiciary in *Federalist No. 78*, Alexander Hamilton contemplated judges who would not be exercising legislative power or imposing their personal views or contemporary mores onto judicial functions. See, *e.g.*, Shlomo Slonim, "Federalist No. 78 and Brutus' Neglected Thesis on Judicial Supremacy," 23 Constitutional Commentary 7 (2006). But in determining what Hamilton called the "manifest tenor of the constitution," the lessons of history learned from centuries-old applications of the law are surely relevant.

CONCLUSION

For the foregoing reasons, the conclusion reached by the Jewish Law authorities should inform this Court's decision on the First and Second Questions Presented in this case and support the position of the petitioners that Kentucky's system of lethal injection violates the Cruel and Unusual Punishment Clause of the Eighth Amendment.

Respectfully submitted,

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AMICUS CURIAE BRIEF

No. 07-5439

IN THE

Supreme Court of the United States

RALPH BAZE, *et al.*,

Petitioners,

—v.—

JOHN D. REES, *et al.*,

Respondents.

ON WRIT OF CERTIORARI TO THE
SUPREME COURT OF KENTUCKY

BRIEF *AMICUS CURIAE* OF THE AMERICAN CIVIL LIBERTIES UNION, THE ACLU OF KENTUCKY, AND THE RUTHERFORD INSTITUTE IN SUPPORT OF PETITIONERS

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Associated Press v. United States, 326 U.S. 1 (1945) 26

California First Amendment Coalition v. Woodford, 299 F.3d 868 (9th Cir. 2002) 25

Coker v. Georgia, 433 U.S. 584 (1977) 24

Evans v. State, 914 A.2d 25 (Md. 2006) 17

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Hustler Magazine v. Falwell, 485 U.S. 46 (1988) 27

In re Oliver, 333 U.S. 257 (1948) 29

In re Readoption with Amendments of Death Penalty Regulations, 842 A.2d 207 (N.J. Super. Ct. App. Div. 2004) 8

Minnesota State Board for Community Colleges v. Knight, 465 U.S. 271 (1984).....27

Morales v. Hickman, 438 F.3d 926 (9th Cir. 2006).....18

Morales v. Tilton, 465 F. Supp. 2d 972 (N.D. Cal. 2006).....13, 15, 18

Morales v. Tilton, No. C-06-219 JF (N.D. Cal. Mar. 6, 2007).....15

New York Times Co. v. Sullivan, 376 U.S. 254 (1964).....26

Penry v. Lynaugh, 492 U.S. 302 (1989).....24

Red Lion Broadcasting Co. v. FCC, 395 U.S. 367 (1969).....26

Richmond Newspapers v. Virginia, 448 U.S. 555 (1980).....27, 28, 29

Roper v. Simmons, 543 U.S. 551 (2005).....24

Saxbe v. Washington Post Co., 417 U.S. 843 (1974).....27

Shepard v. Maxwell, 384 U.S. 333 (1966).....28

Thompson v. Oklahoma, 487 U.S. 815 (1988).....24

Travaglia v. Dep't of Corr., 699 A.2d 1317 (Pa. Commw. Ct. 1997).....8

Trop v. Dulles, 356 U.S. 86 (1958).....24

CONSTITUTIONAL AND STATUTORY PROVISIONS

U.S. Const. amend. VIII 1, 3, 5, 24, 30

U.S. Const. amend. XIV.....30

Mo. Ann. Stat. § 546.720 (3) (West 2007) 11, 12

Mont. Code Ann. § 46-19-103 (5) (2007).....11

COURT PLEADINGS AND ORDERS

Complaint for Declaratory and Injunctive Relief, *Morales v. Calif. Dep't of Corr. and Rehab.*, No. CV061436 (Ca. Super. Ct. Apr. 5, 2006) 17

Complaint for Declaratory and Injunctive Relief, *Pacific News Service v. Woodford* (N.D. Cal. Mar. 8, 2006) 19

Complaint for Writ of Prohibition with Affidavit and Attachments, *State ex rel. Collins v. Burge*, No. 07-1576 (Ohio Aug. 22, 2007) 7, 8

Emergency Petition for a Writ of Mandamus, or in the Alternative, a Writ of Prohibition, Enjoining all Executions, Including the Execution Scheduled for 8:30 P.M. Today, Oct. 15, 2007 at 12-15, *ACLU of Nevada v. Skolnik* (Nev. Oct. 15, 2007) 19

Entry in Prohibition, *State ex rel. Collins v. Burge*, No. 07-1576 (Ohio Oct. 31, 2007) 7, 8

Journal Entry of Judge James Burge, *State v. Rivera*, No. 04CR065940 (Ohio Ct. of Common Pleas July 24, 2007) 7

Motion to Vacate Hearing Date and Continue Hearing at 2-4, *State v. Rivera*, No. 04CR065940 (Ohio Ct. of Common Pleas Oct. 29, 2007).....8

Order After Hearing, *Morales v. Calif. Dep't of Corr. And Rehab.*, No. CV061436 (Cal. Super. Ct. Oct. 31, 2007) 17

LEGISLATIVE HISTORY

Senate Committee on the Judiciary, Amending the Freedom of Information Act, S. Rep. No. 854, 93rd Cong., 2d Sess. 1-2 (1974).....29

Senate Document No. 79 in Documents in the Senate of the State of New York, Fifty-eighth Session, 1835 (Albany: E. Croswell, 1835), Vol. 2, pp. 4, 10.....25

OTHER AUTHORITIES

Letter from Bob Anez, Communications Director, Montana Department of Corrections, to John Adams, Staff Writer, Missoula Independent 4 (Sept. 26, 2007) 10

Brett Barrouquere, *Kentucky Ready for Execution—Only if Things Go Right*, Evansville Courier & Press (Ind.), Sept. 6, 2007).....9

Jeremy Bentham, RATIONALE OF JUDICIAL EVIDENCE (1827) 28

David Biello, *Bad Drugs: Lethal Injection Does Not Work as Designed*, ScientificAmerican.com, April 23, 2007, available at http://www.sciam.com/article.cfm?articleID=20704AC3-E7F2-99DF-3C1F0FEFB917B387&chanID=sa007 ..... 19, 22, 23

David Biello, *Reasonable Doubt*, Scientific American, July 2007 22

Louis Brandeis, OTHER PEOPLE'S MONEY (1933) ... 24

Attorney General Albert B. Chandler, *Open Records Decision: In re: Robert M. Harding / Department of Corrections*, 01-ORD-247 (Dec. 21, 2001) 9

Colorado Department of Corrections, Administrative Regulation, Capital Punishment/Execution by Lethal Injection, Reg. No. 300-14 (Aug. 1, 2006) 10

Colorado Department of Corrections, Execution Day (Mar. 3, 1006), available at http://exdoc.state.co.us/secure/combo/frontend/index.php/contents/view/474 10

Connecticut Department of Correction, Administration of Capital Punishment, Dir. No. 6.15 (Oct. 19. 2004) 10, 11, 20

Deborah W. Denno, *The Lethal Injection Quandary: How Medicine has Dismantled the Death Penalty*, 76 Fordham L. Rev. 49 (2007) ..... *passim*

Deborah W. Denno, *When Legislatures Delegate Death: The Troubling Paradox Behind State Uses of Electrocution and Lethal Injection and What it Says About Us*, 63 Ohio St. L.J. 63 (2002).....6, 7, 9, 18

Editorial, *The Secret of Dr. X*, St. Louis Post-Dispatch, May 29, 2007, at B6 13

Letter from Mike Ferriter, Director, Montana Department of Corrections, to Representative Paul Clark (July 13, 2006) 11

Florida Department of Corrections, *Execution by Lethal Injection Procedures* (July 31, 2007).....16, 20

Human Rights Watch, *So Long as They Die* (2006).....17, 20

Ellen Kreitzberg and David Richter, *But Can It Be Fixed? A Look at Constitutional Challenges to Lethal Injection Executions*, 47 Santa Clara L. Rev. 445 (2007).....11

Adam Liptak, *Sidebar: After Flawed Executions, States Resort to Secrecy*, N.Y. Times, July 30, 2007 .....5, 12, 13

WRITINGS OF JAMES MADISON (G. Hunt ed. 1910)..27

Louis P. Massur, RITES OF EXECUTION (1989) .25, 26

Alexander Meiklejohn, FREE SPEECH AND ITS RELATION TO SELF-GOVERNMENT (1948).....29

Montana Department of Corrections Policies and Procedures, Executions, Doc. 3.6.1 (rev. June 15,

2000), available at http://www.cor.state.mt.us/resources/policies_ch3.asp 9, 10

Montana Department of Corrections, Technical Manual 10

William R. Montross Jr., *Shine a Light on Alabama's Death-Penalty Process*, Birmingham News, Oct. 7, 2007 8

Phillip Rawls, *Alabama Facing Execution Challenge*, Press-Register (Mobile, Ala.), Sept. 30, 2007.....20

Ellyde Roko, Note, *Executioner Identities: Toward Recognizing a Right to Know Who is Hiding Beneath the Hood*, 75 Fordham L. Rev. 2791 (2007).....11, 12, 13

Scott Smith, *Judge Will Visit Death Chamber Before Ruling*, The Record (Stockton, Cal.), Jun. 2, 2007 15

State of California Lethal Injection Protocol Review (May 15, 2007).....7, 16, 21

State of California San Quentin Operational Procedure No. 0-770: Execution by Lethal Injection (May 15, 2007).....12, 15, 16

Chris Tisch, *Testimony in Execution Case Disrupted*, Contra Costa Times (Walnut Creek, Cal.), Feb. 21, 2007) 12

Andrea Weigl, *Did Doctor Monitor Executions?*, News & Observer (Raleigh, N.C.), Mar. 29, 2007 5

Elizabeth Weil, *The Needle and the Damage Done*, N.Y. Times, Feb. 11, 2007 ..... 13, 14, 17, 18, 21

Henry Weinstein, *Secret Talks on Execution Challenged*, L.A. Times, Feb. 2, 2007 15

INTEREST OF *AMICI*[1]

The American Civil Liberties Union (ACLU) is a nationwide, nonprofit, nonpartisan organization with more than 500,000 members dedicated to the principles of liberty and equality embodied in the Constitution. The ACLU of Kentucky is one of its statewide affiliates. *Amici* respectfully submit this brief to assist the Court in resolving serious questions regarding the constitutionality of the protocols used in lethal injection executions. Given its longstanding interest in the protections contained in the Constitution, including the Eighth Amendment's prohibition against cruel and unusual punishment, the proper resolution of those questions is a matter of substantial importance to the ACLU and its members.

The Rutherford Institute is an international civil liberties organization headquartered in Charlottesville, Virginia. Founded in 1982 by its President, John W. Whitehead, the Institute specializes in providing free legal representation to individuals whose civil liberties are threatened or infringed and in educating the public about constitutional and human rights issues. Attorneys affiliated with the Institute have filed briefs as an *amicus* of this Court on numerous occasions. Institute attorneys currently handle over one

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[1] Pursuant to Rule 37.3, letters of consent from the parties have been submitted to the Clerk of the Court. Pursuant to Rule 37.6, counsel for *amici* states that no counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than *amicus curiae*, its members or its counsel made a monetary contribution to its preparation or submission.

hundred cases nationally, including many cases that concern the interplay between the government and its citizens.

Among the purposes of The Rutherford Institute is to foster respect for the uniqueness and paramount worth of human life and to stridently defend fundamental notions of fairness and equality under the law. These values are deeply rooted in America's constitutional tradition and its morality and values, dating back to the Declaration of Independence. It also finds its roots in an informed citizenry that has the knowledge to hold its government accountable. The Rutherford Institute believes that this case concerns fairness and equality in the application of the death penalty, and is vitally important to constitutional jurisprudence and the growth and progress of the nation.

STATEMENT OF CASE

Petitioners are inmates on Kentucky's death row who are challenging the chemicals and procedures Kentucky uses in its lethal injection executions. Kentucky, like every state that performs lethal injections except New Jersey, uses a three drug injection sequence to execute condemned men and women. This method of execution was first created in Oklahoma and was then adopted by the other states without reflection or study. The drugs used are, in order of injection, sodium thiopental, pancuronium bromide, and potassium chloride. Sodium thiopental is a short-acting barbiturate meant to anesthetize the inmate, pancuronium bromide is a neuromuscular blocking agent that completely paralyzes the inmate, and potassium

chloride is intended to cause cardiac arrest in the inmate. If the sodium thiopental is not injected properly and in the right amounts, the inmate will suffer the excruciating pain of slowly suffocating to death due to pancuronium bromide and the painful burning associated with potassium chloride without being able to move or in any way signal his or her pain.

Petitioners initiated a civil proceeding to challenge this execution protocol as a form of cruel and unusual punishment prohibited by the Eighth Amendment. Their claim was rejected both at trial and on appeal, in part on the theory that the Eighth Amendment does not ban methods of execution that create an unnecessary risk of pain but only bans those methods that create a substantial risk of the wanton infliction of pain.

SUMMARY OF ARGUMENT

Amici endorse petitioners' claim that the Eighth Amendment bars the state from employing a method of execution that involves the gratuitous infliction of pain.[2] Rather than repeat those arguments, however, this brief focuses on how that Eighth Amendment violation has been enabled by the lack of transparency surrounding lethal injections across the country.

Lethal injection procedures and executions have been, and continue to be, shrouded in secrecy.

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[2] As petitioners demonstrate, despite the shroud of secrecy surrounding lethal injection protocols, the available facts compel the conclusion that the protocols carry an unnecessary risk of inflicting pain on the condemned.

This shroud of secrecy exists on four levels. First, the procedures that states use during an execution are often kept confidential, protected from public scrutiny. Even lawyers involved in litigation challenging lethal injection and newspapers have been unable to glean critical information from the states about how lethal injection executions are carried out. Second, secrecy reigns even within state governments. The responsibility for creating lethal injection procedures is often delegated to corrections officials without discussion, study, or oversight by democratically accountable representatives. Third, even during executions, witnesses are prevented from seeing all that is occurring. Sometimes curtains physically block the witnesses' view of the inmate and sometimes the physical layout of the execution chambers makes it impossible for the witnesses to know what the state is injecting, who is injecting it, and how quickly it is being injected. Fourth, all but two states have maintained complete secrecy surrounding post-execution records and autopsies. The records kept during executions and the autopsies performed after contain data critical to evaluating the painlessness and humaneness of lethal injection executions, but states refuse to release this information.

The fact that lethal injection is shrouded in secrecy helps to explain why state after state has adopted this method of execution without study or reflection. Transparency in government is a critical aspect of our democracy, and it helps to ensure that public policy accords with contemporary values and civilized standards of decency. The near-total secrecy surrounding lethal injection has unsurprisingly led to a method of execution that

poses an unnecessary risk of excruciating pain. Because that outcome is inconsistent with contemporary values and civilized standards of decency, it violates the Eighth Amendment and should be enjoined.

I. MANY STATES HAVE CLOAKED THEIR LETHAL INJECTION PROTOCOLS AND EXECUTIONS IN SECRECY, INSULATING THEM FROM MEANINGFUL SCRUTINY.

Lethal injection protocols and executions have long been shrouded in secrecy and, thus, shielded from public and even intra-government scrutiny and oversight. As Professor Deborah Denno has explained: "States likely withhold crucial details because, almost invariably, the more data states reveal about their lethal injection procedures, the more those states demonstrate their ignorance and incompetence. The result is a perpetual effort by states to maintain secrecy about all aspects of the execution." *See* Deborah W. Denno, *The Lethal Injection Quandary: How Medicine has Dismantled the Death Penalty*, 76 Fordham L. Rev. 49, 95 (2007) [hereinafter Denno, *Quandary*].[3]

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[3] See also Adam Liptak, *Sidebar: After Flawed Executions, States Resort to Secrecy*, N.Y. Times, July 30, 2007 ("In the wake of several botched executions around the nation, often performed by poorly trained workers, you might think that we would want to know more, not less, about the government employees charged with delivering death on behalf of the state."); Andrea Weigl, *Did Doctor Monitor Executions?*, News & Observer (Raleigh, N.C.), Mar. 29, 2007 (referring to "the veil of secrecy that surrounds executions.").

As explained in further detail below, this shroud of secrecy exists on four levels. At the first level, the procedures (or protocols[4]) used to conduct lethal injection executions are kept confidential. Many states release little if any information about how they conduct the executions. At the second level, the protocols are often not scrutinized by, or even familiar to, democratically accountable members of government because the responsibility for their adoption and adaptation is delegated to department of corrections employees. The third level of secrecy arises during executions. Witnesses to executions are prevented from observing critical matters such as whether the prisoner is suffering pain and whether the state has complied with its protocol. A fourth level of secrecy shields post-execution information regarding what actually happened to the executed inmate during the execution. Few states disclose data that would permit the public to know if the inmate suffered pain before dying.

A. Lethal Injection Protocols are Kept Secret from the General Public.

The vast majority of states have refused to publicly disclose their lethal injection protocols. In Professor Denno's nationwide studies in 2001 and 2005 of lethal injection protocols, state officials have doggedly refused to disclose them. *See generally* Denno, *Quandary*, *supra*; Denno, *When Legislatures Delegate Death: The Troubling Paradox Behind*

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[4] The term "protocol" is a broad one, used here to mean the entire procedure for carrying out a lethal injection, not just the drugs used in such an execution. *See* Denno, *Quandary* at 92 (noting broad meaning of "protocol").

State Uses of Electrocution and Lethal Injection and What it Says About Us, 63 Ohio St. L.J. 63 (2002) [hereinafter Denno, *Delegate*]. In her 2001 study, she found it very difficult to gather these protocols. Denno, *Delegate*, supra, at 116 ("One of the most striking aspects of studying lethal injection protocols concerns the sheer difficulty involved in acquiring them."). Seven states either said that they had no protocol or that their protocol was confidential, and the rest provided protocols that lacked critical details of the execution process. *Id.* at 116-25. Her 2005 study uncovered even more secrecy. Denno, *Quandary, supra*, at 95 ("Since Study 1, states have withdrawn even more information from public scrutiny ...."). In 2005, only six states had completely public protocols. *Id.*

Many states refuse to disclose information about their protocols even to lawyers involved in litigation and reporters investigating lethal injection.[5] In an opinion demanding that the

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[5] Indeed, the states themselves have had a difficult time gaining access to the protocols used by other states. While reviewing its own protocol, California sent a survey to 37 states and the federal government seeking information about their lethal injection procedures. Only 15 jurisdictions responded. State of California Lethal Injection Protocol Review 11 (May 15, 2007). Even judges have encountered resistance when demanding information about lethal injection executions. When an Ohio trial judge held that he had jurisdiction to hold a pre-trial hearing to determine whether lethal injection is cruel and unusual punishment and ordered the Ohio Department of Rehabilitation and Correction (DRC) to provide information about its protocols, the DRC sought a writ of prohibition from the Ohio Supreme Court to prevent the judge from ordering release of the information and from holding a hearing. Journal Entry of Judge James Burge, *State v. Rivera*, No. 04CR065940 (Ohio Ct. of Common Pleas July 24, 2007); Complaint for Writ

Department of Corrections specifically demonstrate why institutional safety required that its lethal injection protocol be kept secret, a New Jersey court noted that the department "resisted much of appellant's broad discovery demand [pertaining to lethal injection procedures] on grounds of privilege or right to confidentiality." *In re Readoption with Amendments of Death Penalty Regulations*, 842 A.2d 207, 212-13 (N.J. Super. Ct. App. Div. 2004).[6] In Alabama, the state provided only heavily redacted pages in response to discovery requests from an attorney representing a condemned inmate in Section 1983 litigation, claiming that the redacted portions were protected by confidentiality agreements. As the attorney explained in an editorial, "what I learned was not much more than what was already known to the general public: very little." William R. Montross Jr., *Shine a Light on Alabama's Death-Penalty Process*, Birmingham News, Oct. 7, 2007. Alabama went ahead with three executions under this veil of secrecy, "without anyone—not a judge, not the public, not the media—ever looking at how Alabama executes people." *Id.*

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of Prohibition with Affidavit and Attachments, *State ex rel. Collins v. Burge*, No. 07-1576 (Ohio Aug. 22, 2007); Motion to Vacate Hearing Date and Continue Hearing at 2-4, *State v. Rivera*, No. 04CR065940 (Ohio Ct. of Common Pleas Oct. 29, 2007). The Ohio Supreme Court denied the writ, allowing the ordered hearing to proceed. Entry in Prohibition, *State ex rel. Collins v. Burge*, No. 07-1576 (Ohio Oct. 31, 2007).

[6] *Cf. Travaglia v. Dep't of Corr.*, 699 A.2d 1317, 1324 (Pa. Commw. Ct. 1997) (upholding "DOC's decision to deny [death sentenced inmate] access to documents relating to lethal injection procedures").

In 2001, the Kentucky Department of Corrections denied a state Open Records Act request for information pertaining to lethal injection on the basis that the request improperly sought information rather than records and because, "'assuming that a protocol for execution by lethal injection even exists, such a policy would be exempt from disclosure...as a threat to security.'" Attorney General Albert B. Chandler, *Open Records Decision: In re: Robert M. Harding/Department of Corrections*, 01-ORD-247, at 3 (Dec. 21, 2001) (quoting Department of Corrections Staff Attorney, Brian A. Logan, Supplemental Response). Only weeks before this Court granted certiorari in this case, Kentucky continued to guard its execution protocol, citing "security concerns in denying open-records requests from The Associated Press." Brett Barrouquere, *Kentucky Ready for Execution—Only if Things Go Right*, Evansville Courier & Press (Ind.), Sept. 6, 2007.

Even those states that release some portions of their protocols continue to keep much important information secret, preventing informed evaluation of the protocols.[7] For example, a three-page document available on the Montana Department of Corrections' website fails to list the specific chemicals or dosages used and refers to an "execution procedural manual" not available on the website. Montana Department of Corrections Policies and Procedures, Executions, Doc. 3.6.1 (rev. June 15, 2000), available at http://www.cor.state.mt.us/

[7] Professor Denno provides a good overview of the types of information that states did and did not provide in their lethal injection protocols as of 2001. Notably, many states' protocols failed to disclose the dosages of lethal drugs that would be administered to inmates. Denno, *Delegate*, *supra*, at 116-25.

resources/policies_ch3.asp. The publicly available document contains almost no information about executions, leaving it to the manual to set out rules governing critical aspects of an execution, such as pre-execution procedures, execution procedures, post-execution procedures, news media, witnesses, and communications. *Id.*[8] Similarly, Colorado's website fails to list drug dosages and states that the warden is responsible for creating "a specific operational memorandum and a 'RESTRICTED DISTRIBUTION' document relative to executions...." Colorado Department of Corrections, Administrative Regulation, Capital Punishment/Execution by Lethal Injection, Reg. No. 300-14 (Aug. 1, 2006); *see also* Colorado Department of Corrections, Execution Day (Mar. 3, 2006), available at http://exdoc.state.co.us/secure/combo/frontend/index.php/contents/view/474. Connecticut's online protocol refers to a "security document" describing execution procedures that is to be distributed only on a "'need-to-know' basis." Connecticut Department of Correction,

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[8] In response to a right to know request, the Montana Department of Corrections disclosed a copy of this manual. See Letter from Bob Anez, Communications Director, Montana Department of Corrections, to John Adams, Staff Writer, Missoula Independent 4 (Sept. 26, 2007). However, the disclosure came with a caveat that the procedure could change before the next execution and with redactions meant to protect the "secure, safe and orderly operation of the prison" and the identity of execution participants. *Id.* at 1, 4. These redactions conceal critical information about lethal injection executions, including much about the procedure used for securing the inmate to the gurney and the first two steps involved in the "final sequence of events" before an execution. See *id.* at 4; Montana Department of Corrections, Technical Manual at 21-22; 41-42.

Administration of Capital Punishment, Dir. No. 6.15 (Oct. 19. 2004).

Some of the most closely guarded secrets are the qualifications,[9] training[10] and identity[11] of the

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[9] "Even in the face of litigation, corrections officials will not release the names and qualifications of executioners. [Litigation in Missouri] initially centered on the Department of Corrections' refusal to reveal *any information* about the executioners. Only when the magistrate judge instituted a protective order did the department release some relevant information." Ellyde Roko, Note, *Executioner Identities: Toward Recognizing a Right to Know Who is Hiding Beneath the Hood*, 75 Fordham L. Rev. 2791 (2007) (emphasis added) (footnotes omitted). In denying a right to know request, the Montana Department of Corrections explained that state law prevented it from revealing anything about executioner qualifications or training: "Mont. Code Ann. § 46-19-103 (5) states, in pertinent part: 'The identity of the executioner must remain anonymous. Facts pertaining to the selection and training of the executioner *must remain confidential.*' (emphasis added). The department, therefore, *cannot give you details about the qualifications or training* of the person who will carry out the execution without violating the statute." Letter from Mike Ferriter, Director, Montana Department of Corrections, to Representative Paul Clark (July 13, 2006) (emphasis added).

[10] During litigation in California, "[t]he state kept the details about the selection, training, and supervision of the execution team a closely held secret only made public by order of the court...." Ellen Kreitzberg and David Richter, *But Can It Be Fixed? A Look at Constitutional Challenges to Lethal Injection Executions*, 47 Santa Clara L. Rev. 445, 507 (2007). *See also*, Roko, *supra* note 9, at 2824-25 (noting that a Florida inquiry into lethal injections found that "the obligation to conceal executioner identities had hampered the investigation" into lethal injection, and that "[s]tates typically do not publicize any requirements for execution team members").

[11] Executioner identities are guarded by statute and by procedural manual in some states. *See, e.g.*, Mo. Ann. Stat. § 546.720 (3) (West 2007) ("A person may not, without the

participants in lethal injection executions. *See* Roko, *supra* note 9 (detailing the history of and issues involved in keeping the qualifications, training and identities of executioners secret). One author notes that, "[i]ronically, as executioner qualifications became more pertinent, the identities became increasingly confidential." *Id.* at 2817. Because lethal injection involves intricate procedures normally performed by highly trained professionals, knowing the training and skill-level of participants is critical to an informed evaluation of the procedure. However, when this secrecy has on occasion been pierced, the results have sometimes been profoundly unsettling. In Missouri, for example, when the press uncovered the identity of the state's lethal injection supervisor, it also learned that he had confused dosages during executions, had a number of malpractice actions filed against him, and had lost

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approval of the director of the department of corrections, knowingly disclose the identity of a current or former member of an execution team or disclose a record knowing that it could identify a person as being a current or former member of an execution team."); Liptak, *supra* note 3 (discussing the Missouri statute and explaining that "[q]uite a few states have similar laws"); State of California San Quentin Operational Procedure No. 0-770: Execution by Lethal Injection (May 15, 2007) (while the death penalty is halted in California due to federal court litigation and this new protocol has not yet been employed, it is filled with dictates that "[t]he names of Lethal Injection Team Members will not be released"). They have even been hidden during depositions. *See, e.g.*, Chris Tisch, *Testimony in Execution Case Disrupted*, Contra Costa Times (Walnut Creek, Cal.), Feb. 21, 2007 ("A machine disguised [the voice of a man testifying before a state commission studying lethal injection] as he spoke over a telephone. He refused to answer detailed questions about his qualifications....").

his privileges to practice at two hospitals.[12] *See* Liptak, *supra* note 3; Editorial, *The Secret of Dr. X*, St. Louis Post-Dispatch, May 29, 2007, at B6.

One of the "critical deficiencies" that a federal judge cited with California's lethal injection protocol was "[a] lack of meaningful training." *Morales v. Tilton*, 465 F.Supp.2d 972, 979 (N.D. Cal. 2006). The judge explained: "the team members almost uniformly have no knowledge of the nature or properties of the drugs that are used or the risks or potential problems associated with the procedure. One member of the execution team, a registered nurse who was responsible for mixing and preparing the sodium thiopental at many executions, testified that '[w]e don't have training, really.'" *Id.* A federal judge uncovered similar glaring training deficiencies in Tennessee:

> The executioners have received only very limited instruction, and that instruction relates to the tasks of the IV Team Members, not the actions they are actually charged with performing....These are known risks—accidents which, given enough of an opportunity, will occur—for which the executioners are completely unprepared. In many cases, the executioners are not even

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[12] *See also* Elizabeth Weil, *The Needle and the Damage Done*, N.Y. Times, Feb. 11, 2007 (describing California case which revealed that "two members of the execution team previously had been arrested for drunken driving, that one had taken mental-health leave for depression and post-traumatic stress disorder from working in the prison system and that another had taken two months' medical leave to recover from a fight with an inmate"); Roko, *supra* note 9 (describing other problems that stem from keeping executioner identities secret).

> aware that the risks exist. This is not a mere "risk of negligence" but a guarantee of accident, written directly into the protocol itself. Accordingly, the court finds that the failure to utilize adequately trained executioners increases the plaintiff's risk of unnecessary pain.

Harbison v. Little, 2007 WL 2821230 at *18 (M.D. Tenn. Sept. 19, 2007). Even the creator of the lethal injection protocol has been highly critical of skill-level of the participants, explaining "'[i]t never occurred to me when we set this up that we'd have complete idiots administering the drugs.'" Weil, *supra* note 12 (quoting Jay Chapman).

Because of the secrecy that surrounds lethal injection protocols, the public, the press and even lawyers for condemned inmates have no way of knowing what the state plans to inject, how much they plan to inject, what the training and skill level of the person who will inject it is, how soon after the inmate's last meal the injection will occur, and other crucial details.

B. Secrecy Cloaks Lethal Injection Even Within State Governments.

In many instances, secrecy has even prevented intra-governmental scrutiny of lethal injection protocols and executions. Many important decisions are often made by corrections officials with little or no input or oversight from democratically accountable representatives.[13]

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[13] *Cf.* Denno, *Quandary*, at 122 ("State agencies have the ability to change protocols without informing the public, and often information about protocols is not subject to state freedom of

In California, even as the state reviewed its lethal injection executions in response to a decision by a federal judge, secrecy reigned. *See Morales*, 465 F.Supp.2d at 982-83; Henry Weinstein, *Secret Talks on Execution Challenged*, L.A. Times, Feb. 2, 2007. In response to a federal court decision holding California's lethal injection protocol unconstitutional, the state agreed to review its policies and release a report detailing the changes it would make, but sought to keep the review secret. Weinstein, *supra*. The judge denied this request,[14] but major aspects of the review, including the construction of a new death chamber, were kept secret from the public and their elected representatives alike. Scott Smith, *Judge Will Visit Death Chamber Before Ruling*, The Record (Stockton, Cal.), Jun. 2, 2007 ("Correctional officials in secret started to build a new death chamber, but Gov. Arnold Schwarzenegger ordered building halted in April once legislators learned of the controversial project that had gone on without their knowledge...."). When California finally proposed a new protocol, it left many critical decisions to the sole discretion of the warden at San Quentin State Prison: "The Warden is responsible for the recruitment, selection, retention, and training of all staff involved in the Lethal Injection process. The Warden is also responsible for managerial oversight and overall implementation of the procedure." State of California, San Quentin Operational Procedure No. 0-770 Execution by Lethal Injection IV.A. (May 15, 2007). The California Department of Corrections

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information laws. Even the mere delegation of execution procedures to corrections officials decreases their visibility.")

[14] *Morales v. Tilton*, No. C-06-219 JF (N.D. Cal. Mar. 6, 2007).

and Rehabilitation researched and developed the protocol, and the department and the warden are the only parties required to approve changes. *Id.* at V.W.1.c.; *see also*, State of California Lethal Injection Protocol Review, May 15, 2007.

Florida's recently revised protocol also gives the execution team warden "final and ultimate decision making authority in every aspect of the lethal injection process" and the authority to permit deviations from the written protocol. Florida Department of Corrections, *Execution by Lethal Injection Procedures* 1-2 (July 31, 2007).

In Tennessee, a federal judge pointed out that the commissioner of corrections had developed the state's new lethal injection protocol without following the recommendations of a committee ordered by the Governor to study the issue. *Harbison v. Little*, 2007 WL 2821230 at *13 (M.D. Tenn. Sept. 19, 2007). In declaring the new protocol unconstitutional, the court stated: "Commissioner [of Corrections] Little, having not attended the committee meetings nor consulted with any of the medical experts whose recommendations the committee sought, unilaterally rejected the committee's recommendations and ordered them to prepare a new...protocol that ended up including none of the 'best practices' of the other states of which the committee had become aware." *Id.* at *27.

In Maryland, in suspending the lethal injection protocol developed by the state's department of corrections because the protocol had not been adopted in compliance with the state's Administrative Procedure Act, a court stressed the need for legislative oversight: "The whole issue of

the death penalty, and particularly the method of its implementation, is of great interest to the Legislature." *Evans v. State*, 914 A.2d 25, 79-81 (Md. 2006). Recent litigation in a California state court has focused on the same issue, with the judge announcing that it would be "proper" to enjoin enforcement of the state's lethal injection protocol because it was not adopted in compliance with California's Administrative Procedure Act. Order After Hearing, *Morales v. Calif. Dep't of Corr. And Rehab.*, No. CV061436 (Cal. Super. Ct. Oct. 31, 2007).[15]

In fact, legislative oversight is an element glaringly absent from the story of lethal injection's adoption as the method of execution in thirty-seven states. As Professor Denno details, the current lethal injection protocol was developed in Oklahoma in 1977 with only the informal input of two doctors. Denno, *Quandary*, *supra*, at 65-70. The procedure was then quickly and unthinkingly copied by state after state without any study or deliberation. *Id.* at 78-79; Human Rights Watch, *So Long as They Die* 10 (2006). As a doctor in Missouri conceded, he "devised the state's execution protocol," which basically mirrors Oklahoma's, "without consulting anyone." Weil, *supra* note 12. State and federal governments

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[15] Plaintiff's complaint explained that the State's failure to adhere to the Administrative Procedure Act "deprives the State's citizens of the opportunity to ensure that executions that are carried out in the name of the People of California are performed properly, humanely, and comply with relevant medical ethical standards.... [And it] undermines public, executive and legislative oversight of agency action." Complaint for Declaratory and Injunctive Relief, *Morales v. Calif. Dep't of Corr. and Rehab.*, No. CV061436 (Ca. Super. Ct. Apr. 5, 2006).

have never performed any type of study to determine the efficacy and humaneness of lethal injection protocols. *Id.* ("[N]either wardens nor legislators in the United States have ever conducted a professional survey on execution procedures or studied how those practices might be improved.").

Secrecy within the government means that critical decisions regarding executions are made by unelected, often uninformed state employees and that other state employees and elected officials have no way to review these decisions, let alone overrule them.

C. Secrecy Guards the Execution Chamber Even From the Eyes of Witnesses.

The shroud of secrecy surrounding lethal injection hides much more than just the states' written procedures. It also prevents witnesses from seeing what the state is actually doing during the execution and what the inmate is experiencing

As petitioners explain in detail in their brief, the use of pancuronium bromide (or Pavulon) as the second drug in the three-drug cocktail prevents witnesses from observing whether the inmate is experiencing pain during the execution. *See* Denno, *Delegate*, at 97-99. The drug's only function is to act as a "chemical curtain" by paralyzing the inmate. Pancuronium bromide does not anesthetize the inmate, does not render the inmate unconscious, and does not cause death. *See Morales v. Hickman*, 438 F.3d 926, 927 n.2 (9th Cir. 2006); *see also Harbison v. Little*, 2007 WL 2821230 at *2; *Morales v. Tilton*, 465 F. Supp. 2d 972, 975-76, 983-84 (N.D.Cal. 2006). Once pancuronium bromide is injected, the inmate

cannot move, speak or otherwise express pain, and the witnesses therefore cannot observe whether he or she is suffering any pain. Complaint for Declaratory and Injunctive Relief at 5-7, *Pacific News Service v. Woodford* (N.D. Cal. Mar. 8, 2006); Emergency Petition for a Writ of Mandamus, or in the Alternative, a Writ of Prohibition, Enjoining all Executions, Including the Execution Scheduled for 8:30 P.M. Today, Oct. 15, 2007 at 12-15, *ACLU of Nevada v. Skolnik* (Nev. Oct. 15, 2007). If the inmate was not properly anesthetized prior to being injected with pancuronium bromide, he or she will endure the excruciating pain of slowly suffocating to death due to lung paralysis (caused by pancuronium bromide) and a painful burning sensation when the third drug (potassium chloride) passes through his or her body.[16] Yet, he or she will be completely unable to communicate this fact to witnesses. The inmate will appear completely still to observers, his or her death a peaceful one. But the reality will be quite another story.

Another shroud of secrecy preventing witnesses from seeing what is actually going on is the curtain used to obscure the witnesses' view of the chamber. What witnesses can and cannot see lies in the sole discretion of the warden and other

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[16] David Biello, *Bad Drugs: Lethal Injection Does Not Work as Designed*, ScientificAmerican.com, April 23, 2007, available at http://www.sciam.com/article.cfm?articleID=20704AC3-E7F2-99DF-3C1F0FEFB917B387&chanID=sa007 [hereinafter Biello, *Bad Drugs*] (citing a scientific study that found that where an inmate is not properly anesthetized, "'death by suffocation would occur in a paralyzed inmate fully aware of the progressive suffocation and potassium-induced sensation of burning'").

corrections officials. In some states, the curtain is not opened until the inmate is already strapped to the gurney and the IV lines have been inserted. *See, e.g.* Phillip Rawls, *Alabama Facing Execution Challenge*, Press-Register (Mobile, Ala.), Sept. 30, 2007, at B1 ("Alabama keeps its lethal injection procedures secret, and a *curtain in the execution chamber* keeps witnesses from seeing the medical professionals who are involved." (emphasis added)); Connecticut Department of Correction, Administration of Capital Punishment, Dir. No. 6.15 (9)-(11) (Oct. 19, 2004) (directing that the IV line be established before the curtains blocking the witnesses' view is opened and that the curtains be closed once the injection is performed and before a doctor pronounces death).

Curtains have prevented witnesses from seeing botched executions. A report by the Human Rights Watch includes a list of known botched lethal injection executions, and in six of the fifteen described the curtain was drawn so that witnesses could not observe whatever problem was occurring in the chamber. Human Rights Watch, *So Long as They Die* 46-50 (2006). Florida's protocol not only calls for the curtain to be opened only after the IV lines have been established and the injection is ready, it also explicitly states that the curtains should be closed if problems occur. Florida Department of Corrections, *Execution by Lethal Injection Procedures* 10-12 (July 31, 2007). The procedure states that the "window covering to the witness gallery" should be closed if the inmate is found to be conscious or if the IV is somehow compromised. *Id.* at 11-12.

The use of separate rooms also shields witnesses from seeing what the state is doing during executions. Located in a separate room behind thick glass, witnesses cannot tell if the state's protocol is being followed properly. Often the chemicals are released by someone who is in yet another room, apart from the rooms in which the witnesses and the inmate are located. *See, e.g.*, State of California Lethal Injection Protocol Review 18 (May 15, 2007) (reviewing visits made by California officials to the death chambers of other states and noting that each had "separations, either a curtain or a wall, between the condemned inmate and the infusion team"); Weil, *supra* note 12 (describing Missouri executions in which the drugs are administered from another room such that the executioner's "identity [is] shielded from witnesses and his psyche [is] distanced from the act of killing"). As a result, there is no way for witnesses to observe what drugs or what dosages are being injected, how quickly, and by whom. As Professor Denno states, "[e]vidence shows that states currently do not follow even their vague protocols." Denno, *Quandary*, *supra*, at 121. She gives the following examples:

> Missouri's Dr. Doe altered the amount of sodium thiopental delivered. Ohio executioners failed to maintain the required dual intravenous access lines. The Florida commission acknowledged that the execution team did not heed the state's existing guidelines for the delivery of chemicals. In California, state officials misled the anesthesiologists about their role while some of those involved in the executions claimed during the *Morales* hearings that they had

never seen the state's protocol. And, in North Carolina, the state and participating doctor ignored a court order to monitor the inmate's level of unconsciousness. *Id.*

In short, pancuronium bromide, curtains and separate rooms ensure that witnesses to executions are unable to observe what the state is actually doing during the execution process and whether the inmate is experiencing any pain.

D. The Shroud of Secrecy Continues Even After the Inmate's Death, Preventing a Final Assessment of the Lethal Injection Procedure.

After an execution, the inmate's body, data collected during the execution, and any autopsy results are generally kept from the public. *See* David Biello, *Reasonable Doubt*, Scientific American, July 2007, at 20, 21 [hereinafter Biello, *Reasonable Doubt*] ("Only a tiny fraction of information on the specifics of the 907 executions carried out by lethal injection as of mid-May is publicly available."). In fact, only two states release these records. Biello, *Bad Drugs, supra* note 16 (citing California and North Carolina as the only states releasing post-execution data). As one expert on lethal injection explained, "'[t]here is an enormous amount of information from executions—autopsies, toxicology, ECG recordings, EEG recordings, execution logs and photographs—but *most of it has been kept secret.*" Biello, *Reasonable Doubt, supra*, at 21 (quoting Dr. Mark Heath) (emphasis added). The public release of this information could reveal critical facts about lethal injection, including: whether the written procedures was properly followed, what amounts of drugs were

administered, whether the IV functioned properly, whether the inmate was conscious during the execution, and whether the inmate was made silently to endure excruciating pain before succumbing to death.

Scientists have studied the post-execution materials that have been released by two states, North Carolina and California, and they have concluded that lethal injection is not working the way the states claim—that it is not painless. David Biello, *Bad Drugs*, *supra* note 16. A study published by *PLoS Medicine* examining 41 of the 891 lethal injection executions performed at that time found that potassium chloride, the intended agent of death, might not be killing the inmates, instead leaving them to suffocate motionlessly under pancuronium-bromide-induced paralysis. *Id.* As one of the researchers, Teresa Zimmers, a molecular biologist, explained, "'[t]his idea that this is a painless procedure is completely wrong....It's just invisible because the person is paralyzed.'" *Id.* When something goes wrong with an execution by electrocution, lethal gas or hanging, the botched results are immediately obvious. *See, e.g.*, Denno, *Quandary*, at 62-63 (describing the extensive burning of execution, the lengthiness of hangings, and the visibly painful suffocation of lethal gas executions). Because lethal injection paralyzes an inmate, placing him or her behind a final shroud of secrecy, the states' failure to disclose post-execution data prevents researchers and the public alike from evaluating the pain and suffering felt by the inmate.

II. THE SHROUD OF SECRECY CLOAKING THE LETHAL INJECTION PROTOCOL HELPS TO EXPLAIN ITS ADOPTION IN KENTUCKY AND OTHER STATES.

"The basic concept underlying the Eighth Amendment is nothing less than the dignity of man...." *Trop v. Dulles*, 356 U.S. 86, 100-101 (1958) (plurality opinion). Accordingly, the Eighth Amendment prohibits punishments that involve "'the purposeless and needless imposition of pain and suffering.'" *Penry v. Lynaugh*, 492 U.S. 302, 335 (1989) (quoting *Coker v. Georgia*, 433 U.S. 584, 592 (1977)). It also bans punishments that are contrary to "'civilized standards of decency.'" *Roper v. Simmons*, 543 U.S. 551, 561 (2005) (quoting *Thompson v. Oklahoma*, 487 U.S. 815, 830 (1988) (plurality opinion)); *see also Penry*, 492 U.S. at 331 (punishment cannot be inconsistent with "contemporary values").

The secrecy in which state governments have shrouded their lethal injection protocols helps to explain how Kentucky and other states have, in unexamined lockstep, adopted a method of execution that creates an unnecessary risk of excruciating pain and that so obviously offends civilized standards of decency and contemporary values. In this context, as in others, governmental practices are most likely to depart from prevailing social norms when they are conducted in secrecy and insulated from meaningful public review and criticism. As Justice Brandeis memorably observed: "Sunlight is ... the best disinfectant." Louis Brandeis, OTHER PEOPLE'S MONEY 62 (1933). For that reason, when the United States moved from public to private executions

during the Eighteenth Century,[17] "the states implemented procedures that ensured executions would remain open to some public scrutiny," including by the press. *California First Amendment Coalition v. Woodford*, 299 F.3d 868, 875-76 (9th Cir. 2002) (citing, *inter alia*, Louis P. Massur, RITES OF EXECUTION 25-27 (1989)). Through the years, public scrutiny of executions has helped to insure that they are conducted without "evasion, perversion, or abuse" and in a manner consistent with our most basic values. *See* Massur, *supra*, at 115 (quoting Senate Document No. 79 in Documents in the Senate of the State of New York, Fifty-eighth Session, 1835 (Albany: E. Croswell, 1835), Vol. 2, pp. 4, 10). As Louis Massur explained:

> The use of newspapers to disseminate information about a private execution was the recommendation of a senate select committee of the New York legislature directed to inquire "into the propriety of abolishing public executions." The committee report summarized what they saw as the most telling defense of public hangings: "that if punishments were privately inflicted, it could not be known whether they were actually, and justly and properly, inflicted upon the persons

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[17] Executions were historically conducted in public both in England and in the United States. See *California First Amendment Coalition v. Woodford*, 299 F.3d 868, 875 (9th Cir. 2002), citing inter alia John Laurence, A History of Capital Punishment 177-178, 179 (1960); John D. Bessler, Televised Executions and the Constitution: Recognizing a First Amendment Right of Access to State Executions, 45 Fed. Comm. L.J. 355, 359-64 (1993). See also Louis P. Massur, RITES OF EXECUTION, 25-27 (Oxford University Press 1989).

> condemned, or that innocent persons had not becomes victims." The legislators reasoned that since so few people could obtain "ocular evidence" of the execution, it would be sufficient to protect against any "evasion, perversion, or abuse" by publishing an account of the hanging attested to by "respectable citizens who would attend the execution not as private spectators but as public witnesses." *Id.*

In our democracy, transparency in government helps to ensure that public policy remains consonant with contemporary values and standards of decency. As this Court has repeatedly stressed in its first amendment jurisprudence, secrecy in government is antithetical to popular self-determination and to the development of sound public policy in the marketplace of ideas. In his famous dissent in *Abrams v. United States*, Oliver Wendell Holmes explained that "the theory of our Constitution" is that "the ultimate good desired is better reached by free trade in ideas-that the best test of truth is the power of the thought to get itself accepted in the competition of the market, and that truth is the only ground upon which [citizens'] wishes safely can be carried out." 250 U.S. 616, 630 (1919) (Holmes, J., joined by Brandeis, J., dissenting). In *Red Lion Broadcasting Co. v. FCC*, this Court declared that our Constitution countenances "an uninhibited marketplace of ideas in which truth will ultimately prevail, rather than ... monopolization of that market...by the Government...." 395 U.S. 367, 390 (1969) (citing *Associated Press v. United States*, 326 U.S. 1, 20 (1945); *New York Times Co. v. Sullivan*, 376 U.S. 254, 270 (1964); *Abrams v. United States*,

250 U.S. 616, 630 (1919) (Holmes, J., dissenting)); *see also Hustler Magazine v. Falwell*, 485 U.S. 46, 52 (1988) (opinion by Chief Justice Rehnquist stressing "the truth-seeking function of the marketplace of ideas"); *Globe Newspaper v. Co. v. Superior Court*, 457 U.S. 596 (1982) ("Public scrutiny of a criminal trial enhances the quality...of the factfinding process, with benefits to both the defendant and to society as a whole.").

James Madison put the matter pithily: "A popular Government, without popular information, or the means of acquiring it, is but a Prologue to a Farce or a tragedy; or, perhaps both. Knowledge will forever govern ignorance: And a people who mean to be their own Governors, must arm themselves with the power which knowledge gives." 9 WRITINGS OF JAMES MADISON 103 (G. Hunt ed. 1910). Justice Powell stressed "our Nation's commitment to popular self-determination and our abiding faith that the surest course for developing sound national policy lies in a free exchange of views on public issues," adding that "public debate must not only be unfettered; it must also be informed." *Saxbe v. Washington Post Co.*, 417 U.S. 843, 862-863 (1974) (Powell, J., dissenting); *see also Minnesota State Bd. for Community Colleges v. Knight*, 465 U.S. 271, 300 (1984) (Stevens, J., joined by Powell, J., and Brennan, J., dissenting) (Constitution guarantees "an open marketplace for ideas-where divergent points of view can freely compete for the attention of those in power and of those to whom the powerful must account"); *Richmond Newspapers v. Virginia*, 448 U.S. 555, 569 n.7 (1980) (plurality opinion) ("Bentham also emphasized that open proceedings enhanced the performance of all involved, protected

the judge from imputations of dishonesty, and served to educate the public." (citing 1 Jeremy Bentham, RATIONALE OF JUDICIAL EVIDENCE 522-525 (1827))).

Given the shroud of secrecy in which states have cloaked their lethal injection protocols, it is not surprising that they have adopted an ill-considered protocol that needlessly risks the infliction of excruciating pain during the execution process and that deeply offends civilized standards of decency and contemporary values. As this Court has eloquently declared, "informed public opinion is the most potent of all restraints upon misgovernment...." *Grosjean v. American Press Co.*, 297 U.S. 233, 250 (1936). In his plurality opinion in *Richmond Newspapers v. Virginia*, 448 U.S. 555 (1980), Chief Justice Burger pointed out that "Jeremy Bentham not only recognized the therapeutic value of open justice but regarded it as the keystone," and quoted Betham's memorable warning:

> Without publicity, all other checks are insufficient: in comparison of publicity, all other checks are of small account. Recordation, appeal, whatever other institutions might present themselves in the character of checks, would be found to operate rather as cloaks than checks; as cloaks in reality, as checks only in appearance." 1 J. Bentham, *Rationale of Judicial Evidence* 524 (1827).'

Id. at 569. Chief Justice Burger also quoted Justice Clark's opinion in *Shepard v. Maxwell*, 384 U.S. 333, 349 (1966), that Anglo-American law has long reflected "'[t]he principle that justice cannot survive behind walls of silence.'" 448 U.S. at 573-74, n.9; *see*

also In re Oliver, 333 U.S. 257, 270 (1948) ("[C]ontemporaneous review in the forum of public opinion is an effective restraint on possible abuse" of governmental power); *Globe Newspaper v. Co. v. Superior Court*, 457 U.S. 596 (1982) ("Public scrutiny of a criminal trial...safeguards the integrity of the factfinding process, with benefits to both the defendant and to society as a whole."); Senate Committee on the Judiciary, Amending the Freedom of Information Act, S. Rep. No. 854, 93rd Cong., 2d Sess. 1-2 (1974) ("[T]he people's right to learn what their government is doing through access to government information can be traced back to the early days of our Nation. Open government has been recognized as the best insurance that government is being conducted in the public interest...."). As Alexander Meiklejohn observed:

> Just so far as . . . the citizens who are to decide an issue are denied acquaintance with information or opinion or doubt or disbelief or criticism which is relevant to that issue, just so far the result must be ill-considered, ill-balanced planning, for the general good. It is that mutilation of the thinking process of the community against which the First Amendment to the Constitution is directed.

Alexander Meiklejohn, FREE SPEECH AND ITS RELATION TO SELF-GOVERNMENT 26 (1948).

Cloaked as they have been in secrecy and posing as they do an unnecessary risk that the government will inflict excruciating pain on those who are legally required to endure the execution process, the states' lethal injection protocols are the epitome of ill-considered, ill-balanced misgovernment

completely at odds with civilized standards of decency and contemporary values. This Court should hold that the protocols violate the Eighth and Fourteenth Amendments to the United States Constitution.

CONCLUSION

For the reasons stated herein, the judgment below should be reversed.

Respectfully submitted,

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AMICUS CURIAE BRIEF

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In the Supreme Court of the United States

Ralph Baze and Thomas C. Bowling,

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v.

John D. Rees, et al.,

Respondents.

On Writ of Certiorari to the
Kentucky Supreme Court

BRIEF OF *AMICUS CURIAE* AMERICAN SOCIETY OF ANESTHESIOLOGISTS SUPPORTING NEITHER PARTY

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INTEREST OF THE *AMICUS CURIAE*

The American Society of Anesthesiologists [hereinafter "the Society"] is an educational, research and scientific association of approximately 42,000 physicians organized to raise and maintain the standards of the medical practice of anesthesiology and improve the care of patients. Since the Society's founding in 1905, its achievements have made it an important voice in American medicine and the foremost advocate for all patients who require anesthesia, critical care or relief from pain.

The 42,000 physician-members of the American Society of Anesthesiologists are unified by their study and practice of the art and science of anesthesiology. In other respects, the Society's members are as heterogeneous as the American public. The opinions of the Society's members on capital punishment reflect the personal moral decisions of each individual. Therefore, the Society, as an organization, takes no position on capital punishment. Nor does the Society offer any opinion herein about whether lethal injection, as presently

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[1] Pursuant to Rule 37.2 of the Rules of this Court, the parties have consented to the filing of this brief. The letters granting consent are filed herewith. This brief was not written in whole or in part by counsel for any party, and no person or entity other than *amicus* and their counsel has made a monetary contribution to the preparation and submission of this brief.

practiced in the United States, comports with the Eighth Amendment.

Instead, the Society offers this brief (on behalf of neither party) to describe the scientific and medical research related to the delivery of anesthetic care and to demonstrate how executions by lethal injection, as currently performed in the United States, can never conform to the science, art and practice of anesthesiology.

As a matter of policy, the Society eschews physician participation in executions as unethical and contrary to the duty of physicians as healers dedicated to using their arts and skills solely to relieve pain and suffering and to preserve life, when there is hope of doing so. The Society has adopted the American Medical Association's ["AMA's"] Code of Ethics and reasserts here that it fully endorses the AMA's ethical guideline E-2.06, which prohibits physician participation in executions:

> An individual's opinion on capital punishment is the personal moral decision of the individual. A physician, as a member of a profession dedicated to preserving life when there is hope of doing so, should not be a participant in a legally authorized execution. Physician participation in execution is defined generally as actions which would fall into one or more of the following categories: (1) an action which would directly cause the death of the condemned; (2) an action which would assist, supervise, or contribute to the

ability of another individual to directly cause the death of the condemned; (3) an action which could automatically cause an execution to be carried out on a condemned prisoner.

Physician participation in an execution includes, but is not limited to, the following actions: prescribing or administering tranquilizers and other psychotropic agents and medications that are part of the execution procedure; monitoring vital signs on site or remotely (including monitoring electrocardiograms); attending or observing an execution as a physician; and rendering of technical advice regarding execution.

In the case where the method of execution is lethal injection, the following actions by the physician would also constitute physician participation in execution: selecting injection sites; starting intravenous lines as a port for a lethal injection device; prescribing, preparing, administering, or supervising injection drugs or their doses or types; inspecting, testing, or maintaining lethal injection devices; and consulting with or supervising lethal injection personnel.

American Medical Association Ethical Guideline E-2.06 *Capital Punishment* (2000).

SUMMARY OF STATEMENT

Anesthesiologists are highly trained physician specialists who treat patients intra-operatively as well as practice pain and critical care medicine. Medical ethics prohibit physician participation in executions. In the fashion and doses used, thiopental, pancuronium bromide and potassium chloride are not anesthetics. Any requirement that anesthesiologists or other physicians assess inmate consciousness as part of an execution would be anathema to ethical medical practice and cannot be condoned.

STATEMENT OF AMICUS

I. The products used by prisons in executions are not administered in a manner and in doses consistent with the art and science of anesthesiology.

It is our understanding that most executions in the United States are conducted by the serial injection of bolus (single and large) doses of three drugs: sodium thiopental, followed by pancuronium bromide, then potassium chloride.[2]

In particular, the first two of these drugs were developed for medical and therapeutic use and not

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[2] Deborah W. Denno, *When Legislatures Delegate Death: The Troubling Paradox Behind State Uses of Electrocution and Lethal Injection and What It Says About Us*, 63 OHIO ST. L.J. 63, 97-100 (2002).

for terminating life. They are drugs which have complex actions in the human body and their risks and benefits must be understood fully before administration.

A. Thiopental.[3]

General anesthesia is divided into three phases: induction, maintenance and emergence. When used in anesthetic practice (e.g., in a fashion and at doses much different from those being considered by the courts), thiopental is an ultra short-acting barbiturate typically used to induce anesthesia that is administered intravenously by a clinician at the bedside of the patient. In these clinical doses, the drug has both a rapid onset and short duration, although its duration of action as an anesthetic is dose dependent. There is no medical dispute that a massive or superclinical dose of thiopental (as those being considered by the courts), if effectively delivered into the circulation, will reliably produce prolonged and deep unconsciousness.

Anesthesiologists typically use thiopental to temporarily anesthetize patients, creating a state of unconsciousness that usually necessitates instituting mechanical support of ventilation. Once ventilation has been achieved, additional drugs are administered to maintain a "surgical depth" or "surgical plane" of anesthesia, i.e., a level of

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[3] Thiopental is also known as sodium thiopental, sodium pentothal, or thiopentone. It will be referred to throughout this brief as thiopental.

anesthesia deep enough to ensure that a surgical patient does not experience pain or consciousness and has no recall of any aspect of the procedure.

B. Pancuronium Bromide.

Pancuronium bromide is a member of a class of drugs called neuromuscular blocking agents. Neuromuscular blocking agents interfere with the transmission of signals between nerve endings and muscles. The effect of pancuronium bromide is to render the muscles (including the diaphragm which moves to cause ventilation) unable to contract. Pancuronium bromide does not affect the brain or sensory nerves and therefore does not affect sensation, consciousness or cognition.

Clinically, neuromuscular blocking agents are used to ensure that a patient is securely paralyzed so that surgical procedures can be performed without muscle contraction. They are essential tools for anesthesiologists when it is critical that the patient's muscles remain relaxed or immobilized. Neuromuscular blockers are administered by anesthesiologists only for therapeutic purposes to prevent potentially harmful reflex movement during surgery or to facilitate surgical access. Neuromuscular blocking agents are never intentionally administered to patients who are not adequately anesthetized. Otherwise it is possible that the patient could consciously experience the process of becoming paralyzed and losing the ability to breathe.

Because pancuronium bromide and other neuromuscular blocking agents prevent the patient from moving or signaling distress, anesthesiologists take stringent measures to monitor patients receiving such drugs to prevent any awareness of their paralysis or of the surgical procedures.

C. Potassium Chloride.

Potassium chloride is a naturally occurring salt. When dissolved in water, it releases potassium ions, which are an essential constituent of the aqueous milieu of the human body. The blood concentration of potassium is naturally maintained in a narrow range, and a rapid increase in the blood concentration of potassium will cause cardiac arrest.

The vessel walls of veins are richly supplied with sensory nerve fibers that are highly sensitive to potassium ions. Intravenous injection of concentrated potassium, particularly through veins in peripheral limbs, will activate the sensory nerve fibers of the lining of those veins which may cause significant pain. The doses and concentrations of potassium chloride in the manner used in lethal injections would never be used in the practice of medicine.

II. Understanding the art and science of anesthesiology

To appreciate that execution by lethal injection as currently practiced is ***not*** the delivery of anesthetic care, one must first understand the art and science of anesthesiology.

An anesthesiologist is a highly trained specialist in the care of a patient prior to, during and after surgery. The anesthesiologist evaluates his or her patient prior to surgery, designs an anesthetic plan, and then cares for the patient during the surgical procedure. During surgery, an anesthesiologist monitors the patient's blood pressure, heart rate, breathing and level of consciousness and analgesia (relief from pain). The anesthesiologist adjusts the anesthetic plan, medications, fluids and other parameters continuously throughout surgery to provide a safe, pain- and recall-free surgical experience. After the surgery, the anesthesiologist affects a smooth emergence from the anesthetic by withdrawing and reversing the medications used to produce maintenance. In the immediate post-operative period, the anesthesiologist is responsible for the overall well-being of the patient, managing many issues such as pain, bleeding, nausea, fluid balance and cardiovascular and respiratory functions.

Typically, an anesthesiologist must complete four years of college to earn an undergraduate degree, four years of medical school to earn a medical degree, one year of internship, and at least three years of training in an accredited anesthesiology residency program. The physician then often completes another one or two years in a subspecialty of anesthesiology (e.g., Obstetrical Anesthesiology, Cardiac Anesthesiology, Pediatric Anesthesiology or Pain Medicine).

To become "Board Certified" by the American Board of Anesthesiology, an anesthesiologist must complete a minimum of 12 years of study in accredited programs as described above. Then he or she must pass comprehensive testing that involves both written and oral examinations.

The practice of anesthesiology is often described as both an art and a science. As scientists, anesthesiologists study physiology, biochemistry and the anatomy of the human body. Anesthesiologists are experts in the application of pharmacological principles to reliably produce the anesthetic state and to manage the physiology and health of patients. Because the practice of anesthesiology is deeply reliant on sophisticated monitoring technology, anesthesiologists must be highly proficient in the use of complex equipment and devices. As physicians, anesthesiologists must know about the diagnosis and treatment of a broad spectrum of human diseases and pathophysiologic conditions because patients with any condition can present for surgery at any time.

This scientific knowledge is applied for the benefit of a patient in a dynamic surgical environment in which the patient's condition is rapidly changing. As such, anesthesiology requires careful attention, judgment and skill. It is more than the simple application of scientific principles to a living person – it is a medical art.

The practice of this art and science requires anesthesiologists to engage in continual intra-operative monitoring relying on multiple modalities,

including clinical techniques (e.g., checking for clinical signs such as purposeful or reflex movement) and conventional monitoring systems (e.g., electrocardiogram, blood pressure, heart rate, pulse oximetry, end-tidal anesthetic analyzer and capnography).

CONCLUSION

The Society cannot express a legal opinion about whether the Eighth Amendment demands that condemned inmates be sufficiently unconscious to offset the certain pain or suffering they would experience if pancuronium bromide or potassium chloride is administered when the condemned is conscious.

In light of the prohibition against physician participation in executions, any requirement that there be an adequate assessment of inmate consciousness presents an irreconcilable conundrum that is not of the Society's making and which the Society cannot solve for the Court.

Requiring the participation of qualified medical personnel to assess consciousness during an execution is a step the Society cannot condone. It is a fundamental and unwavering principle that

anesthesiologists, consistent with their ethical mandates, cannot use their art and skill to participate in an execution.

Respectfully submitted,

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AMICUS CURIAE BRIEF

No. 07-5439

IN THE

Supreme Court of the United States

RALPH BAZE ET AL.,
Petitioners,

v.

JOHN D. REES ET AL.,
Respondents.

On Writ of Certiorari to the
Supreme Court of Kentucky

BRIEF OF ANESTHESIA AWARENESS CAMPAIGN, INC. AS *AMICUS CURIAE* IN SUPPORT OF NEITHER PARTY

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American Society of Anesthesiologists Task Force on Intraoperative Awareness, *Practice Advisory for Intraoperative Awareness and Brain Function Monitoring*, 104 Anesthesiology 847 (2006) 8–11

Anesthesia Awareness Campaign, Inc., *Suggestions for Improvement in the Anesthesia System* (2007), *available at* http://www.anesthesiaawareness.com/improvements.html 10

M.M. Ghoneim, *Awareness During Anesthesia, in* Awareness During Anesthesia (M.M. Ghoneim ed., 2001) 2–3, 9

Joint Commission on Accreditation of Healthcare Organizations, Sentinel Event Alert Issue 32, *Preventing, and Managing the Impact of, Anesthesia Awareness* (Oct. 6, 2004), *available at* http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_32.htm ..... *passim*

Claes Lennmarken & Gunilla Sydsjo, *Psychological Consequences of Awareness and Their Treatment*, 21 Best Practice &

Research Clinical Anesthesiology 357 (2007) 3, 6–7

N. Moerman, B. Bonke, & J. Oosting, *Awareness and Recall During General Anesthesia: Facts and Feelings*, 79 Anesthesiology 454 (1993) 7

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INTEREST OF *AMICUS CURIAE* AND SUMMARY OF ARGUMENT[1]

The Anesthesia Awareness Campaign, Inc. ("AAC") is a non-profit organization founded in 1998 that is dedicated to helping victims, providing education, and working to prevent anesthesia awareness. Anesthesia awareness, also called intraoperative awareness or conscious paralysis, is the phenomenon of being mentally alert while supposedly under full general anesthesia. In some instances, victims are able to feel excruciating pain but are unable to communicate their awareness because they are paralyzed by a neuromuscular blocker. The AAC was founded by Carol Weihrer who, having received general anesthesia and been paralyzed by a neuromuscular blocker, was conscious and aware when her eye was surgically removed.

The AAC's mission is "to prevent patients (even one) from experiencing anesthesia awareness and its consequences through education, prevention, and empowerment by replacing ignorance or fear with knowledge." The AAC's Board of Directors includes medical professionals and anesthesiologists as well as Ms. Weihrer. The AAC has worked with the Joint Commission on Accreditation of Healthcare Organizations ("JCAHO") on raising awareness about this medical complication. JCAHO consulted with the

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[1] No counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund preparation of this brief. No person other than *amicus curiae*, its members, or its counsel made a monetary contribution to its preparation or submission. The parties have consented to the filing of this brief and their written consents are being filed today with the Clerk.

AAC when drafting JCAHO's 2004 Sentinel Event Alert Issue 32 on preventing and managing cases of anesthesia awareness.

The AAC takes no position on the requirements of the Eighth Amendment. However, because the execution protocol at issue in this case carries a risk for anesthesia awareness, the AAC believes that it is essential for the Court to be fully informed about three things. First, anesthesia awareness is a real and recognized medical complication. Second, when anesthesia awareness occurs, it can produce severe physical and psychological pain, particularly when general anesthesia is combined with a neuromuscular blocker that prevents patients from communicating with care providers. Third, the AAC and the medical community have identified safeguards that can—indeed, must—be must be employed whenever general anesthesia is used, in order to minimize the risk of such devastating consequences. These safeguards include refraining from the use of neuromuscular blockers except when absolutely medically necessary; using reliable monitoring of anesthetic depth by an anesthesia professional; avoiding intravenous-only administration of anesthesia; and having trained anesthesia professionals administer the general anesthesia. Each of these points is more fully developed below.

ARGUMENT

I. Anesthesia Awareness Is a Real and Widely-Recognized Medical Complication.

Anesthesia awareness has been recognized as a potential medical complication since as early as

1846.[2] In 1960, the pioneer medical study on the incidence of awareness under general anesthesia was published.[3] Anesthesia awareness is reported to occur in between 0.1% and 0.9% of general anesthesia cases—and those are cases where anesthesia is typically administered by a trained and licensed anesthesia professional.[4] Thus, at a minimum, awareness occurs in one out of every one thousand cases of general anesthesia, equaling some 26,000 occurrences of anesthesia awareness each year in the United States.[5]

Anesthesia awareness may occur even where the patient is not paralyzed by use of a neuromuscular blocker. For purposes of this brief, however, the AAC focuses on cases of anesthesia awareness where patients receive both anesthesia and a neuromuscular blocker that prevents them from indicating to the surgical team that they are aware despite the general anesthesia.

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[2] See M.M. Ghoneim, *Awareness During Anesthesia, in* Awareness During Anesthesia 1, 3 (M.M. Ghoneim ed., 2001).

[3] See Claes Lennmarken & Gunilla Sydsjo, *Psychological Consequences of Awareness and Their Treatment*, 21 Best Practice & Research Clinical Anesthesiology 357, 358 (2007).

[1] See Richard J. Pollard et al., *Intraoperative Awareness in a Regional Medical System: A Review of Three Years' Data*, 106 Anesthesiology 269, 269 (2007) (summarizing findings from prior studies).

[5] Peter S. Sebel et al., *The Incidence of Awareness During Anesthesia: A Multicenter United States Study*, 99 Anesthesia & Analgesia 833, 836–37 (2004).

II. Anesthesia Awareness Can Cause Severe Physical and Psychological Pain.

AAC's participants bear personal witness to the awful physical and psychological injuries that can arise as a result of anesthesia awareness. They were rendered unconscious by anesthesia, only to suddenly find themselves awake and aware but unable to move or call out for help. They were filled with anxiety and panic, they felt pain, and they suffered grievous physical and psychological damage.[6]

Kathleen LaBrie is an AAC participant who received general anesthesia and a neuromuscular blocker for an operation opening both sinus cavities and a deviated septum. She describes her experience as follows:

> I'll never forget what happened. I realized something was very, very wrong when I awoke to the grinding and pushing in my nose. I also could hear conversations. I was awake and unable to let anyone know. I really thought I was slowly dying and not one person in that room cared. If anyone wants to know what HELL is like this is it, what happened to me. This was the most horrifying, terrifying, nightmare, living hell of my life. The experience created post-traumatic stress disorder, outbursts of anger for no reason, problems with trust, concentration, and socializing, panic attacks, emotional numbness,

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[6] AAC President Carol Weihrer testified in the trial in this case as to her personal experience with anesthesia awareness, and the transcript of her testimony is set forth in the Joint Appendix at 387–400. Her testimony is also briefly summarized in the Petitioners' Brief at 11.

> nightmares, and I am easily startled. I have the feeling of needing to be on guard at all times. It was the worst thing that ever happened to me, and I don't know who I am now. I consider conscious paralysis worse than death . . . .

AAC participant Kelly Haapala received general anesthesia and a neuromuscular blocker for a hip-socket joint replacement after a car accident. Ms. Haapala's description of becoming conscious during surgery is as follows:

> Halfway into the surgery, I started to awaken. I first couldn't figure out where I was and then as the drugs wore off more, I realized where I was . . . I could feel the tugging and pushing on my left side and slowly the pain began to surface. I kept telling myself it must be a nightmare but the pain was so unbearably severe that I began to worry that my body would not be able to withstand this stress and pain and that I would die! It was as if a hot poker was being jammed into me. . . . I felt like they were killing me and I needed to do anything I could to move and let them know I was awake!
>
> I still have nightmares that this happened to me and even compared to the accident, this is the worst terror that I've ever experienced . . . I have problems with sleeping, problems with trusting, feel like I need to try to make every day for my children and family as good as it can be because I am so scared that our lives together will be taken away.
>
> For someone to ever experience conscious paralysis and be awake during a procedure and

> feel the pain like I did, it is just worse than death and is inhumane!

Diana Todd, a participant of AAC who suffered conscious paralysis during hysterectomy surgery, offers this account of her experience:

> I was awake, aware, paralyzed, utterly terrified, unable to do anything about it no matter how hard I tried, and I wished I could die. I remember thinking, "Take me now, please take me." This was the most traumatizing experience of my life. It takes away your basic humanity. That kind of terror is cruel beyond description. There is simply no way to adequately describe what it is like to have every single scrap of your own self control stripped away. You can't even scream to relieve the pressure.
>
> Amongst the problems in the aftermath of my trauma, I have nightmares, crippling indecision, fears, panic attacks, some claustrophobia, inability to sleep for long periods, sleep restfully, without a light, or to sleep on a normal schedule, and I am exhausted all the time.
>
> I consider conscious paralysis to be cruel, dehumanizing, unnecessary, and unforgivable.

Descriptions of anesthesia awareness in the published medical literature echo these accounts from the AAC. It is well recognized that victims of anesthesia awareness endure "immediate, intraoperative suffering . . . [and that] long-lasting severe mental symptoms may develop."[7] Medical studies indicate that anesthesia awareness can create "great anxiety

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[7] Lennmarken, *supra* note 3, at 357.

and panic" and terrible sensations of alarm and fright, including "fears of impending death.,"[8] Aware patients may sense pain, pressure, or other stimuli associated with the surgical procedure, but, because of their paralysis, they are unable to notify their physicians.[9]

The following are descriptions of several patients' experiences with anesthesia awareness detailed in the Moerman study:

> Woke up suddenly, feeling intensive pain in the middle of her chest, tried to move backwards and scream but was unable to do so, terrified as if in a nightmare.
>
> Felt intense pain in, and heavy pulling on, her abdomen, heard voices, could not move, felt powerless, tried to warn but was unable to do so, was frightened she might suffer more pain.
>
> Felt and heard being manipulated on his leg, heard drilling and tightening of screws . . . tried to warn anyone but was unable to do so . . . afraid to feel more pain, panicked, thought he might never get out of it and might become comatose.
>
> Felt increasing pain until pain was unbearable . . . wanted to warn anyone but was unable to do so, unable to talk, powerless.[10]

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[8] *Id.*

[9] N. Moerman, B. Bonke, & J. Oosting, *Awareness and Recall During General Anesthesia: Facts and Feelings*, 79 Anesthesiology 454, 461–62 (1993).

[10] *Id.* at 460.

It is likewise well documented in the medical literature that the experience of anesthesia awareness while a patient is paralyzed and unable to communicate can traumatize a person: "The realization of consciousness of which operating room staff are evidently oblivious, along with increasingly frenetic yet futile attempts to signal with various body parts, leads rapidly to the conclusion that something has gone seriously wrong," and can trigger "shock and traumatization."[11] This trauma can cause post-traumatic stress disorder (PTSD) and other serious psychological consequences such as "recurrent nightmares related to paralysis, preoccupation with death, sleep anxiety and initial insomnia."[12] These acute post-awareness psychological complications underscore the severity of the actual trauma that occurs during anesthesia awareness.

III. Whenever General Anesthesia Is Used, Measures Can—and Must—Be Taken To Minimize the Risk of Anesthesia Awareness.

In light of the increased awareness of the existence and the potentially devastating nature of anesthesia awareness, the JCAHO,[13] the American Society of

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[11] See Michael Wang, *The Psychological Consequences of Explicit and Implicit Memories of Events During Surgery*, *in* Awareness During Anesthesia 145, 147–48 (M.M. Ghoneim, ed. 2001).

[12] *Id.* at 150.

[13] Joint Commission on Accreditation of Healthcare Organizations, Sentinel Event Alert Issue 32, Preventing, and Managing the Impact of, Anesthesia Awareness (Oct. 6, 2004), *available at* http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_32.htm [hereinafter JCAHO Alert].

Anesthesiologists ("ASA"),[14] and the American Association of Nurse Anesthetists ("AANA")[15] have all issued practice advisories for the prevention and management of anesthesia awareness. The AAC strongly believes that any use of general anesthesia must be carried out in accordance with medical practices that can greatly reduce the risk that a person will suffer anesthesia awareness.

First, when general anesthesia is used, a neuromuscular blocker should not be used unless doing so is absolutely medically necessary.[16] One advisory cautions anesthesia professionals to "[a]void muscle paralysis unless absolutely necessary, and, even then, avoid total paralysis."[17] In one 2007 medical study, each confirmed instance of anesthesia awareness involved the use of a neuromuscular blocker with general anesthesia.[18]

Second, a reliable form of anesthesia monitoring should be used on persons under general anesthesia. Such monitoring can track indicators of physiologic

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[14] American Society of Anesthesiologists Task Force on Intraoperative Awareness, *Practice Advisory for Intraoperative Awareness and Brain Function Monitoring*, 104 Anesthesiology 847 (2006) [hereinafter *ASA Practice Advisory*].

[15] American Association of Nurse Anesthetists, Position Statement 2.12: Unintended Awareness Under General Anesthesia, *available at* www.aana.com (follow "Resources: Practice Documents" hyperlink) [hereinafter AANA Position Statement].

[16] See JCAHO Alert, *supra* note 13; ASA Practice Advisory, *supra* note 14, at 850; AANA Position Statement, *supra* note 15, Table II; Ghoneim, *supra* note 2, at 13–14.

[17] JCAHO Alert, *supra* note 13.

[18] Pollard et al., *supra* note 4, at 270.

and motor responses to painful stimuli, such as high blood pressure, fast heart rate, movement, or hemodynamic changes.[19] The ASA recommends anesthesia monitoring by "multiple modalities" and cautions that the "use of neuromuscular blocking drugs may mask purposeful or reflex movements and adds additional importance to the use of monitoring methods that assure the adequate delivery of anesthesia."[20]

The AAC believes that brain wave activity monitoring, in addition to monitoring of physiologic and motor responses, is a necessary and important part of monitoring for anesthesia awareness.[21] The Food and Drug Administration has endorsed this view, finding that an anesthesia professional's "[u]se of BIS [a medical device that monitors brain wave activity] monitoring to help guide anesthetic administration may be associated with the reduction of the incidence of awareness with recall in adults during general anesthesia and sedation."[22]

Third, avoiding delivery of general anesthesia solely by intravenous means can reduce the chance

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[19] JCAHO Alert, *supra* note 13; *ASA Practice Advisory*, *supra* note 14, at 851, 854; AANA Position Statement, *supra* note 15; Ghoneim, *supra* note 2, at 17.

[20] *ASA Practice Advisory*, *supra* note 14, at 854. See also AANA Position Statement, *supra* note 15.

[21] Anesthesia Awareness Campaign, Inc., *Suggestions for Improvement in the Anesthesia System*, *available at* http://www.anesthesiaawareness.com/improvements.html.

[22] JCAHO Alert, *supra* note 13.

that a person will suffer anesthesia awareness.[23] Instead, it is generally recommended that anesthesia be delivered by both inhalant and intravenous means.[24]

Finally, general anesthesia should be administered only by trained anesthesiology personnel.[25] In a surgical setting, an anesthesia professional administers the anesthesia and remains at the patient's bedside, monitoring real-time indicators to track anesthetic depth. A trained professional helps ensure that patients given general anesthesia receive the appropriate level of medical care to minimize the risk of conscious paralysis.

In the AAC's view, these measures must be employed to minimize the risk that anyone undergoing general anesthesia will suffer the terrible physical and psychological injuries associated with anesthesia awareness.

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[23] JCAHO Alert, *supra* note 13; *ASA Practice Advisory*, *supra* note 14, at 850.

[24] See JCAHO Alert, *supra* note 13.

[25] See Pollard, *supra* note 4, at 272 ("Clinical anesthesiologists supervising registered nurse anesthetists in the anesthesia care team model of practice delivered all anesthetics in this study."). A fully-trained anesthesiologist must fulfill three years of residency experience, after medical school and a one-year internship. A nurse anesthetist must complete a four-year baccalaureate degree, several years of nursing experience in an acute care setting, and then a master's degree of two to three years.

CONCLUSION

The Court's decision in this case should take into account that any use of general anesthesia entails a significant risk of anesthesia awareness, especially when combined with a neuromuscular blocker; that the experience of anesthesia awareness is often a devastatingly painful one, as the accounts from the AAC's participants show; and that there are methods for minimizing the risk of anesthesia awareness that must be employed in order to avoid the unnecessary imposition of such injuries on any person undergoing general anesthesia.

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IN THE

Supreme Court of the United States

RALPH BAZE, *et al.*

Petitioners,

v.

JOHN D. REES, *et al.*

Respondents.

ON WRIT OF CERTIORARI TO THE
SUPREME COURT OF KENTUCKY

BRIEF OF DRS. KEVIN CONCANNON, DENNIS GEISER, CAROLYN KERR, GLENN PETTIFER, AND SHEILAH ROBERTSON AS *AMICI CURIAE* IN SUPPORT OF PETITIONERS

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Alaska Stat. 08.02.050 18

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S.C. Code Ann. § 47-3-420(A) 18

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American Veterinary Medical Association Guidelines on Euthanasia (June 2007) 10, 11, 14, 19

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INTEREST OF THE *AMICI CURIAE*

Drs. Kevin Concannon, Dennis Geiser, Carolyn Kerr, Glenn Pettifer and Sheilah Robertson (the "Veterinary Amici") respectfully submit this brief of *amici curiae* in support of Petitioners Ralph Baze and Thomas C. Bowling. Consent of Petitioners' counsel and Respondents' counsel has been obtained for the filing of this brief.[1]

The Veterinary Amici are experienced veterinarians, with extensive knowledge regarding veterinary anesthesia. They regularly face issues regarding the humane euthanasia of animals. They also have specific expertise regarding the chemicals used by the State of Kentucky in lethal injections, including the limitations and effects of these chemicals in euthanizing animals.

Dr. Kevin Concannon is a veterinarian and a diplomate of the American College of Veterinary Anesthesiologists. During nearly 20 years as a practicing veterinarian, he has taught veterinary anesthesia and served as a supervisor of clinical anesthesia at both the University of California - Davis and North Carolina State University College of Veterinary Medicine. He has worked for the past ten years as an emergency/critical care clinician, anesthesia consultant and hospital director at the Veterinary Specialty Hospital of the Carolinas.

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1. Letters of consent are being filed herewith. Counsel for a party did not author this brief in whole or in part. No person or entity other than the *amici curiae* and their counsel made a monetary contribution to the preparation or submission of the brief.

Dr. Dennis Geiser is a veterinarian and a diplomate of the American Board of Veterinary Practitioners. He is a professor of veterinary science at the University of Tennessee and the Assistant Dean of Organizational Development and Outreach at the College of Veterinary Medicine at the University of Tennessee. Dr. Geiser teaches equine respiratory disease and large animal anesthesia, conducts clinical work in anesthesiology and pain management, and conducts research in pain management, balance of anesthesia in animals and local and regional anesthesia.

Dr. Carolyn Kerr is a veterinarian and a diplomate of the American College of Veterinary Anesthesiologists. She has a D.V.Sc. in Veterinary Anesthesia and a Ph.D. in Physiology. Dr. Kerr is currently an associate professor at the Ontario Veterinary College at the University of Guelph. She has practiced veterinary medicine for 18 years and has lectured in veterinary anesthesia, pain management and euthanasia for the last 7 years to veterinary students and researchers at the University of Guelph.

Dr. Glenn Pettifer is a veterinarian and has a D.V.Sc. in veterinary anesthesiology. He is a diplomate and an executive board member of the American College of Veterinary Anesthesiologists. He currently practices veterinary anesthesiology at the Veterinary Emergency Clinic in Toronto, Canada. Dr. Pettifer formerly taught veterinary anesthesiology and pain management at Louisiana State University and was later the Chief of Anesthesia Service there.

Dr. Sheilah Robertson is a specialist in veterinary anesthesiology and pain management. She is a diplomate of the European and American Colleges of Veterinary Anesthesia and is currently a professor in the section of anesthesia and pain management at the University of Florida's College of Veterinary Medicine. She has published widely on the stress response to anesthesia in horses and on the alleviation of pain in many species.

Based on their years of experience in the field of veterinary anesthesia and pain management, the Veterinary Amici respectfully present the Court with information concerning the methods by which humane euthanasia is achieved in animals, and the difficulties involved in achieving humane euthanasia using the chemicals and procedures called for in Kentucky's lethal injection protocol.

SUMMARY OF ARGUMENT

Humane euthanasia

The term euthanasia comes from the Greek words "eu" and "thanatos," which combined mean "well death" or "dying well." The primary goal of veterinarians who euthanize animals is to achieve death humanely, avoiding needless pain and suffering of the patient. *See* Ky. Rev. Stat. § 258.095(12) ("'[E]uthanasia' means the act of putting an animal to death in a humane manner. . . ."). To this end, veterinarians carefully consider the characteristics of the drugs that may be administered for the purpose of euthanasia, avoiding those that would cause unnecessary pain.

Euthanasia can be divided into two parts: (1) rendering an animal unconscious, followed by (2) inhibition of brain, heart, or both brain and heart function. An unconscious, properly anesthetized animal will not undergo physical or mental distress during the euthanasia process. Intravenous injection of an anesthetic drug most reliably and commonly produces this state of unconsciousness. Injection of increasing amounts of an anesthetic produces changes to a patient's mental state from light sedation, to unconsciousness, to profound brain depression and death. In clinical practice, veterinary anesthesiologists use the term "surgical plane of anesthesia" to define a particular point in the middle of this progression characterized by unconsciousness, loss of reflex muscle response, and attenuation of the stress responses of the body. Veterinarians take care to keep their patients in or beyond the surgical plane of anesthesia during the euthanasia process.

The preferred method for humane euthanasia by veterinarians – and the one required under Kentucky law – involves the use of a euthanasia solution that contains a single drug, sodium pentobarbital. 201 Ky. Admin. Regs. 16:090 § 5(1). Sodium pentobarbital is a long-acting anesthetic that quickly places the patient in a deep, surgical plane of anesthesia when injected intravenously. An overdose of sodium pentobarbital causes the patient to move past a surgical plane of anesthesia to profound brain depression resulting in death. Significantly, all this occurs with only transient and minimal pain to the patient associated merely with the venipuncture itself because the patient is unconscious.

As explained herein, Kentucky's current lethal injection protocol would not meet the minimum standards for the humane euthanization of animals.

The Kentucky lethal injection protocol

Kentucky's lethal injection protocol does not call for the use of sodium pentobarbital. Rather, the best available information about Kentucky's protocol suggests that death is achieved by the intravenous injection of three different drugs. Specifically, the inmate first is injected with three grams of sodium thiopental, which is an "ultra short-acting barbiturate" intended to anesthetize – but not kill – the inmate. *Baze v. Rees*, No. 04-CI-01094, 2005 WL 5797977 (Ky. Cir. Ct. July 8, 2005), J.A. 762. Following a saline flush, the inmate is injected with fifty milligrams of pancuronium bromide, a neuromuscular blocking agent used to paralyze the inmate's voluntary muscles. *See id.* at 763-64. After another saline flush, the inmate is finally administered two hundred and forty milliequivalents of potassium chloride, which results in an alteration in impulse generation in the heart, leading to cessation of cardiac activity and directly causing death. *Id.*

Two of the three drugs used in the Kentucky protocol – pancuronium bromide and potassium chloride – cause severe pain and suffering when administered to a patient who is conscious. For that reason, many states, including Kentucky, do not allow pancuronium bromide to be used to euthanize animals, and veterinary standards prohibit the use of potassium chloride unless a patient is unconscious. This unconsciousness must be maintained throughout the euthanasia process.

Although Kentucky's protocol provides for an initial injection of anesthetic in the form of sodium thiopental, there is a danger that this injection is insufficient to achieve or maintain the state of unconsciousness a veterinarian would require before using potassium chloride to euthanize an animal. Sodium thiopental is an ultra short-acting barbiturate whose anesthetic effects wear off quickly. If there is any delay during an execution and no additional dose of sodium thiopental is administered, there is a risk that the drug's effects will diminish, resulting in the inmate being conscious at the time the other two drugs are administered and experiencing pain from those drugs. Moreover, even without a delay, the duration of the anesthetic effect of the sodium thiopental will be abbreviated if the proper dose is not injected. (This is especially true if the predetermined three-gram dose, which is given to all inmates without any consideration for their weight, proves insufficient.) The likelihood of an inappropriate dose of sodium thiopental is increased when those individuals responsible for the administration of the drug during an execution are not specifically trained to administer such anesthetics.[2]

The risk of inappropriate depth of anesthesia prior to the administration of the pancuronium bromide and potassium chloride is aggravated by the fact that the Kentucky protocol does not allow for the assessment necessary under veterinary standards to determine whether a surgical plane of anesthesia has been reached

2. Although greater doses of sodium thiopental may decrease the risk that its anesthetic effects will wear off, there exist other anesthetics (such as sodium pentobarbital) whose half-lives are much longer.

or exceeded. Kentucky protocol does not require an individual trained in anesthesiology to determine that the inmate is unconscious before the injection of either pancuronium bromide or potassium chloride, let alone both. Unlike standard practice in veterinary medicine, there appears to be no requirement in Kentucky that the inmate be observed, or that executioners monitor or perform any tests on the inmate, during the execution process. To the contrary, publicly available information regarding lethal injection procedures indicates that there is no observer – much less a trained observer – in close enough proximity to the inmate to determine the plane of anesthesia. In contrast, a veterinarian euthanizing an animal continuously evaluates a number of physiologic parameters to ensure that the animal is anesthetized to an appropriate depth before administering a drug that causes the animal's death. This evaluation requires constant contact with, and monitoring of, the patient to confirm that the proper level of anesthesia is maintained.

Further complicating the evaluation of an individual's depth of anesthesia is the use of a neuromuscular blocking agent, such as the pancuronium bromide used in the Kentucky protocol. In the context of veterinary euthanasia, pancuronium bromide is unnecessary to bring about death. The Veterinary Amici are unaware of any veterinarian or veterinary group that advocates the use of neuromuscular blocking agents during the euthanasia procedure. Because pancuronium bromide paralyzes the patient, it inhibits the veterinarian's ability to determine the patient's level of consciousness. A patient who has been injected with pancuronium bromide would appear to the eye to be anesthetized when in fact

the patient could be fully conscious of the pain suffered as a result of the potassium chloride injection. In addition, pancuronium bromide itself would cause suffering in an inadequately anesthetized patient. As a neuromuscular blocker, pancuronium bromide inhibits all of the patient's voluntary muscular functions, including breathing. If a patient is injected with pancuronium bromide before reaching a surgical plane of anesthesia, the patient will experience the feeling of suffocation while conscious.

In sum, Kentucky's procedures for lethal injection do not meet the minimum standards of care used by veterinarians to provide for the humane euthanization of animals. Based on their vast experience with euthanasia and the drugs involved in the Kentucky lethal injection protocol, the Veterinary Amici offer the information herein to assist the Court in determining whether inmates sentenced to death are subjected to a foreseeable danger of unnecessary pain and suffering during the execution process under Kentucky's current protocol.

ARGUMENT

I. THE PROTOCOL FOR THE USE OF POTASSIUM CHLORIDE IN KENTUCKY EXECUTIONS FAILS TO COMPLY WITH MINIMUM VETERINARY STANDARDS FOR HUMANE EUTHANASIA OF ANIMALS

A. Humane Euthanasia Prohibits the Use of Potassium Chloride in a Conscious Patient

The use of potassium chloride, the drug that results in death under the Kentucky lethal injection protocol, fails to comply with minimum veterinary standards for the humane euthanasia of animals. A potassium chloride solution for intravenous injection contains high concentrations of potassium and chloride ions, which cause severe pain and suffering in a conscious patient from the moment of injection. *See Harbison v. Little*, No. 3:06-1206, 2007 WL 2821230, at *11 (M.D. Tenn. Sept. 19, 2007) ("It is undisputed that, without proper anaesthesia, the administration of pancuronium bromide and potassium chloride, either separately or in combination, would result in a terrifying, excruciating death."). Specifically, an injection of potassium chloride irritates the inner walls of a patient's veins, which are particularly sensitive to potassium. Potassium chloride ultimately results in alterations in impulse generation in the heart, leading to cessation of cardiac activity and death.

Because intravenous injection of potassium chloride causes severe pain to a conscious patient, American Veterinary Medical Association ("AVMA") standards

provide that potassium chloride may be administered only to a patient who has reached a surgical plane of anesthesia. AVMA standards also provide that it is of the "utmost importance" that the anesthesia be administered by someone trained and knowledgeable in anesthetic techniques:

> It is of utmost importance that personnel performing this technique are trained and knowledgeable in anesthetic techniques, and are competent in assessing anesthetic depth appropriate for administration of potassium chloride intravenously. Administration of potassium chloride intravenously requires animals to be in a surgical plane of anesthesia characterized by loss of consciousness, loss of reflex muscle response, and loss of response to noxious stimuli.

AVMA Guidelines on Euthanasia (June 2007) (formerly the 2000 Report of the AVMA Panel on Euthanasia) at 12, *available at http://www.avma.org/issues/animal_welfare/euthanasia.pdf* (hereinafter, "AVMA Report"). Because of the painful effects of the drug, use of potassium chloride on a conscious patient is "unacceptable" and "absolutely condemned" in humane euthanasia. *See* AVMA Report at 12. Thus, a veterinarian may administer potassium chloride only if he can first ascertain that unconsciousness has been reached.

B. A Veterinarian Following Kentucky's Lethal Injection Protocol Would Not Be Able to Ensure That a Patient Was at a Surgical Plane of Anesthesia

A surgical plane of anesthesia is described as "loss of consciousness, loss of reflex muscle response, and loss of response to noxious stimuli." AVMA Report at 12. Although use of potassium chloride on an animal that has not reached this state is "absolutely condemned" by the AVMA, *see id.*, Kentucky's lethal injection protocol appears to include no procedures to ensure that an inmate has reached a surgical plane of anesthesia before the injection of potassium chloride. Nor are steps taken to ensure that the surgical plane of anesthesia, once established, is maintained or exceeded.[3] *See Baze*, J.A. 764 (finding that Kentucky's lethal injection protocol does not use an electrocardiogram, a blood pressure cuff or a Bispectral Index monitor during administration of the drugs to monitor for consciousness).

In veterinary medicine, evaluating whether a patient has achieved an appropriate plane of anesthesia is both a science and an art. It is extremely difficult for an untrained individual to appropriately assess a patient's anesthetic depth, and veterinarians rely on their skill and experience to do so. The observer must perform a variety of tests to assess the level of consciousness throughout the procedure and must be able to consider and perceive sometimes subtle clues from the patient.

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3. An inmate could be conscious either because the individual has not yet lost consciousness or because he has regained consciousness after being anesthetized.

Typically, a veterinarian, or a trained assistant, maintains constant contact with a patient throughout the process of administering anesthesia. In determining whether the patient is sufficiently anesthetized, a veterinarian assesses the level of consciousness by direct evaluation of the patient's physiologic parameters. Among the many vital signs considered are the patient's muscle tone and the level of the patient's muscle relaxation. A veterinarian also assesses the position of the eye and the presence or absence of any eye movement. The patient's respiratory and heart rates must be monitored. The veterinarian also tests the patient's reaction to stimuli by applying mildly painful stimuli and observing any movement by the patient. The veterinarian touches the patient to help assess these variables, and relies on monitors for data such as blood pressure and heart rate. Such steps are necessary to ensure that the patient has reached the desired surgical plane of anesthesia, and require an experienced veterinarian to touch and observe the patient at close proximity. Because a variety of factors must be considered, the process of examining the patient takes several minutes, not merely a glance.

In contrast, Kentucky's lethal injection protocol appears to make no provision for an appropriate examination of an inmate's consciousness during the anesthetic process, much less by a physician or medical professional experienced in administering anesthesia. Rather, most of the observers and the individuals performing the lethal injection typically remain in a separate room from which they would be unable to evaluate the inmate for consciousness during the execution. For the individuals who are in the execution

chamber, there is no indication that these persons remain in sufficiently close proximity to the inmate to perform any of the above-described tests.

The risk of consciousness is not merely theoretical. Evidence regarding executions performed using the same three-drug combination of sodium thiopental, pancuronium bromide and potassium chloride called for in Kentucky's lethal injection protocol suggests that a number of inmates appeared to have retained consciousness throughout the execution. *See, e.g., Morales v. Tilton*, 465 F. Supp. 2d 972, 980 (N.D. Cal. 2006) (noting that several California inmates may have remained conscious despite the purported injection of five grams of sodium thiopental, two grams more than the dose called for in Kentucky's lethal injection protocol); Florida Corrections Commission, Supplemental Report - Methods of Execution Used by States (1997) at 10 (*formerly available at http://www.fcc.state.fl.us/fcc/reports/reports.html*) (acknowledging that some recipients of the three-drug combination undergoing a "violent reaction to lethal drugs," raising grave concerns that the inmates were not, in fact, fully anesthetized prior to the potassium chloride injection).

Finally, proper veterinary procedure demands that a veterinarian administering euthanasia solution to a patient ensure that all of the euthanasia solution was delivered intravenously. Sodium thiopental must be properly administered intravenously, which can be extremely difficult if not impossible for an untrained individual. If the anesthetic is not properly injected directly into the patient's vein, the medication will leak into surrounding tissue, thus lessening the effectiveness

of the intended dosage. With a pH of 11, sodium thiopental is very alkaline, and therefore would produce a burning sensation and tissue damage if the drug were not administered intravenously.

Given the myriad of potential problems created by Kentucky's complex lethal injection procedure, the administration of drugs by inexperienced personnel with inadequate training serves only to increase the risk that the sodium thiopental anesthetic will not be properly delivered to the inmate, and that the inmate will remain inadequately anesthetized when the potassium chloride is administered. Without providing for careful monitoring of an inmate's level of consciousness, Kentucky's lethal injection protocol falls far short of the precautions required in humane veterinary euthanasia.

C. The Short-Acting Nature of Sodium Thiopental Makes It More Difficult to Maintain a Surgical Plane of Anesthesia Than the Anesthetic Used in Veterinary Euthanasia

The AVMA standards for euthanasia indicate that the ideal barbiturate for use in euthanasia is "potent, long-acting, stable in solution and inexpensive." AVMA Report at 11. Consistent with these standards, Kentucky's animal euthanasia regulations allow only for the use of sodium pentobarbital for euthanasia of animals. 201 Ky. Admin. Regs. 16:090 § 5(1).[4] As used in

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4. AVMA guidelines do not limit the barbiturate to sodium pentobarbital. Sodium pentobarbital is the preferred method, however.

euthanasia, sodium pentobarbital rapidly produces unconsciousness and then depresses the areas of the brain responsible for respiratory and cardiovascular control. With a single injection of sodium pentobarbital, the patient rapidly progresses from a light to deep level of anesthesia and ultimately dies.

In contrast to the Kentucky standard for euthanasia in animals, the Kentucky lethal injection protocol does not use sodium pentobarbital to achieve anesthesia and death for inmates. Rather, it calls for the use of sodium thiopental, and then only for the purpose of anesthesia. Sodium thiopental, however, is considered an "ultra short acting" barbiturate anesthetic. *Baze*, J.A. 762. Its anesthetic effects therefore wear off more rapidly than those of sodium pentobarbital. As such, if sodium thiopental were used to euthanize a veterinary patient, the need for the veterinarian to evaluate for consciousness would be all the more critical.

II. THE USE OF PANCURONIUM BROMIDE MASKS CONSCIOUSNESS AND IS CONTRARY TO HUMANE VETERINARY EUTHANASIA

A. Pancuronium Bromide Causes a Conscious Patient to Experience Suffocation

Pancuronium bromide, the second drug administered under the Kentucky lethal injection protocol, does not contribute to anesthesia or unconsciousness. It is not an anesthetic or an analgesic. It serves no therapeutic purpose whatsoever. Rather, pancuronium bromide is a neuromuscular blocking agent that completely paralyzes a patient's voluntary muscles. A conscious patient who is administered pancuronium bromide will endure pain and mental distress. Specifically, a conscious patient would be aware of the need to breathe, the inability to do so and the terrifying experience of suffocation. *See Harbison*, 2007 WL 2821230, at *11 ("The basic mechanics [of pancuronium bromide and potassium chloride] are that the inmate would first be paralyzed and suffocated (because the paralysis would make him unable to draw breath), then feel a burning pain throughout his body, and then suffer a heart attack while remaining unable to breathe."). The inmate's suffering, however, would not be readily apparent to observers, however, because the lack of muscular movement and inability to communicate would make the inmate appear calm.

B. Pancuronium Bromide Inhibits the Ability to Assess a Patient's Consciousness

The muscle paralysis caused by pancuronium bromide masks indicia of consciousness, making it even more difficult for observers to ascertain whether the patient is unconscious. As described above, determining whether a patient has achieved a surgical plane of anesthesia involves careful observation, including observation of the patient's muscle movements and response to stimuli. Paralyzing the patient makes it far more difficult for a veterinarian to effectively determine the patient's level of consciousness. The use of pancuronium bromide therefore could create the impression that a patient is unconscious, calm or serene when the patient is actually in extreme pain or suffering.

Several of the Veterinary Amici advised the Court of this precise risk in *Hill v. McDonough*, 126 S. Ct. 2096 (2006), in connection with Florida's lethal injection protocol, which is for all pertinent purposes identical to that employed in Kentucky. Br. of Amici Curiae Drs. Kevin Concannon, Dennis Geiser and Glenn Pettifer Supporting Pet., *Hill v. McDonough*, 126 S. Ct. 2096 (2006) at 14. Less than one year after the *Hill amicus* brief was filed, Angel Diaz was put to death by lethal injection. Following reports that the execution was botched, then-Governor Bush created a Commission on Administration of Lethal Injection, which was "unable to reach a conclusion as to whether inmate Angel Diaz was in pain during the execution." *Lightbourne v. McCollum*, No. SC06-2391, 2007 WL 3196533, at *2 (Fla. Nov. 1, 2007). Similarly, a trial court reviewing evidence about the Diaz execution found that "'[i]t is unclear and disputed whether inmate Diaz suffered any pain. It is unclear exactly how conscious or unconscious

inmate Diaz was after [he was injected with sodium thiopental]. . . . No witness testified that inmate Diaz screamed or yelled after the injection of pancuronium bromide or potassium chloride.'" *Id.* at *15. It was precisely this inability to determine the level of consciousness or pain that the Veterinary Amici had cautioned against in their *Hill* brief. Failure to communicate pain could be the result of (i) the absence of pain or (ii) the inability to express the pain. Use of a paralytic agent, specifically pancuronium bromide, renders the subject unable to express pain and thereby inhibits the ability to determine whether the subject is experiencing any pain, and if so, the severity of the pain.

In a veterinary context, pancuronium bromide is wholly superfluous to the goal of humane euthanasia. Its only effect would mask any suffering endured by the patient and interfere with an assessment of consciousness. Its use as contemplated by the Kentucky lethal injection protocol is therefore contrary to veterinary standards and humane euthanasia of animals.[5]

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5. In addition to Kentucky, at least 22 other states have prohibited the use of neuromuscular blocking agents in euthanizing animals, either expressly or by specifically mandating the use of a method such as sodium pentobarbital. *See, e.g.*, Ala. Code § 34-29-131; Ala. Admin. Code r. 930-x-1-.36; Alaska Stat. 08.02.050; Ariz. Rev. Stat. Ann. § 11-1021; Colo. Rev. Stat. § 18-9-201; Del. Code Ann. tit. 3, § 8001; Fla. Stat. § 828.058; Ga. Code Ann. § 4-11-5.1; 510 Ill. Comp. Stat. 70/2.09; Kan. Stat. Ann. 47-1718(a); La. Rev. Stat. Ann. § 3:2465(C)(1); Me. Rev. Stat. Ann. tit. 17, § 1044; Md. Code Ann., Crim. Law § 10-611(a)(3); Mass. Gen. Laws Ann. ch. 140, § 151A; Mo. Ann. Stat. § 578.005(7); N.J. Stat. Ann. § 4:22-19.3; N.Y. Agric. & Mkts. Law 374(2-b); Okla. Stat. tit. 4, § 501(c); S.C. Code Ann. § 47-3-420(A); Tenn. Code Ann. § 44-17-303(c); Tex. Health & Safety Code Ann. § 821.052(a); W. Va. Code Ann. § 30-10A-8; Wyo. Stat. Ann. § 33-30-216.

III. THE PREFERRED METHOD OF HUMANE EUTHANASIA IN ANIMALS IS THE USE OF SODIUM PENTOBARBITAL ALONE

In contrast to the drugs called for in Kentucky's lethal injection protocol, the preferred method for euthanasia of veterinary patients is intravenous injection of a solution that contains a barbiturate called sodium pentobarbital. Sodium pentobarbital depresses the central nervous system, with loss of consciousness progressing to anesthesia. With a sufficiently large overdose of the drug, deep anesthesia progresses to apnea and ultimately cardiac arrest within a matter of minutes. Use of sodium pentobarbital results in rapid loss of consciousness and minimal or transient pain associated merely with insertion of the needle. AVMA Report at 11. Moreover, it is potent, long-acting, stable in solution and inexpensive.

Consistent with the goal of achieving death in animals in the most humane manner possible, Kentucky veterinary law mandates that humane euthanasia be accomplished by the use of a single drug: sodium pentobarbital. 201 Ky. Admin. Regs. 16:090 § 5(1).[6] This avoids the use of either pancuronium bromide or potassium chloride. It thus makes irrelevant the fact that "[i]t is undisputed that, without proper anesthesia, the administration of pancuronium bromide and potassium chloride, either separately or in combination, would result in a terrifying, excruciating death." *Harbison*, 2007 WL 2821230, at *11.

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6. The Kentucky regulation allows only two options: sodium pentobarbital, or sodium pentobarbital with lidocaine. Lidocaine is a common local anesthetic.

CONCLUSION

For all the foregoing reasons, the Veterinary *Amici* respectfully submit that the protocol for execution by lethal injection, as presently articulated by the State of Kentucky, fails to comport with veterinary standards for humane euthanasia.

Respectfully submitted,

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AMICUS CURIAE BRIEF

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IN THE

Supreme Court of the United States

RALPH BAZE, ET AL.,

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v.

JOHN D. REES, ET AL.,

Respondents.

On Writ of Certiorari to the Supreme Court of Kentucky

BRIEF OF *AMICI CURIAE* CRITICAL CARE PROVIDERS AND CLINICAL ETHICISTS IN SUPPORT OF PETITIONERS

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Robert D. Truog, et al., *Recommendations for End-Of-Life Care in the Intensive Care Unit: The Ethics Committee of the Society of Critical Care Medicine*, 29 CRIT. CARE MED. 2332 (2001) 11, 12

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INTEREST OF *AMICUS CURIAE*[1]

Amici curiae are physicians, professors of medicine, clinical ethicists, and other health care providers who specialize in critical care medicine, medical ethics, and end-of-life care. *Amici curiae*, each of whom is listed below, respectfully submit this brief to provide the Court with a medical ethics perspective on the use of pancuronium bromide, the second of the three-drug protocol used by the Commonwealth of Kentucky for carrying out lethal injections.

Dr. Robert D. Truog is Professor of Medical Ethics and Anesthesiology (Pediatrics) at Harvard Medical School and a Senior Associate in Critical Care Medicine at Children's Hospital Boston.[2] Dr. Truog is an expert in the ethical issues that arise in anesthesia and critical care, and the author of national guidelines for providing end-of-life care in the intensive care unit. Dr. Truog serves as the Director of Clinical Ethics in the Division of Medical Ethics and the Department of Social Medicine at Harvard Medical School; a member of the Harvard Embryonic Stem Cell Research Oversight Committee; and a member of the Harvard University Faculty

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[1] Pursuant to this Court's Rule 37.3, the parties have consented to the filing of this brief. Pursuant to this Court's Rule 37.6, *amici curiae* state that no counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than *amici curiae* or their counsel made a monetary contribution to its preparation or submission.

[2] Each *amicus curiae* submits this brief in his or her individual capacity. All of *amici curiae*'s organizational and professional affiliations noted in this section are for identification purposes only.

Committee of the Edmond J. Safra Foundation Center for Ethics. He received The Christopher Grevnik Memorial Award from the Society of Critical Care Medicine for his contributions and leadership in the area of ethics.

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3 Dr. Danis's submission of this brief reflects her personal views; it is not a reflection of the policies of the National Institutes of Health or the United States Department of Health and Human Services.

member of the Harvard Ethics Leadership Group; and a faculty member for the annual Harvard Bioethics Course. She is a co-author of a New England Journal of Medicine article regarding pharmacologic paralysis and the withdrawal of mechanical ventilation at the end of life.

Dr. Bernard Lo, MD is Professor of Medicine and the Director of the Program in Medical Ethics at the University of California San Francisco. He chaired a national Expert Panel to Develop Clinical, Ethical, and Policy Recommendations Regarding Care Near the End of Life. Dr. Lo is the author of the textbook RESOLVING ETHICAL DILEMMAS: A GUIDE FOR CLINICIANS and over 190 academic papers on medical ethics, palliative care, and end-of-life care.

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SUMMARY OF ARGUMENT

Pancuronium bromide, the second drug in the three-drug protocol used by the Commonwealth of Kentucky, is a neuromuscular blocking agent that paralyzes all muscles under a person's voluntary control. Neuromuscular blocking agents serve narrow functions in clinical medicine. Anesthesiologists use such agents during the induction of anesthesia to insert a breathing tube through the patient's mouth down into the trachea,

and during some surgical procedures to ensure that the patient's body remains completely still. These agents are also used in limited circumstances in the intensive care setting, including, for example, to facilitate the use of mechanical ventilation equipment.

The Commonwealth of Kentucky has asserted that the administration of pancuronium bromide in the lethal injection procedure serves the aesthetic purpose of masking muscle movements such as convulsions or gasps that witnesses may perceive as suffering. The medical community has considered this aesthetic rationale for administering neuromuscular blocking agents in end-of-life care where a terminally ill patient's body may exhibit similar movements after the withdrawal of life support. For a number of reasons, the medical and medical ethics communities have rejected the introduction of neuromuscular blocking agents for this purpose.

Neuromuscular blocking agents possess no sedative or pain-relieving properties and therefore serve no palliative function for a dying patient. At the same time, the use of such drugs brings significant risks to the patient. Neuromuscular blocking agents can paralyze the patient's diaphragm and cause a patient to asphyxiate. In addition, neuromuscular blocking agents can mask the physical signs that doctors look for when attempting to identify whether a dying patient is suffering pain. For example, drugs like pancuronium bromide may suppress the visual signs of acute air hunger associated with the withdrawal of a ventilator, leaving the patient to endure the agony of suffocation in silence and isolation. In light of these risks, the

medical community has concluded that it is medically and ethically inappropriate to use pancuronium bromide or other paralytic agents for aesthetic purposes during the withdrawal of life support.

ARGUMENT

I. PANCURONIUM BROMIDE IS A NEUROMUSCULAR BLOCKING AGENT THAT PARALYZES THE BODY'S VOLUNTARY MUSCLES

Pancuronium bromide is a member of the class of drugs known as "neuromuscular blocking agents." It is a synthetic derivative of "curare," a poison used for centuries by indigenous peoples in South America to immobilize prey. See Thandla Raghavendra, *Neuromuscular Blocking Drugs: Discovery and Development*, 95 J. ROYAL SOC'Y MED. 363, 365 (2002); see also Palmer Taylor, *Agents Acting at the Neuromuscular Junction and Autonomic Ganglia*, *in* GOODMAN & GILMAN'S THE PHARMACOLOGICAL BASIS OF THERAPEUTICS 217, 220 (Laurence L. Brunton et al. eds., 11th ed., 2005). Neuromuscular blocking agents are paralytics. . They prevent the body's skeletal muscles—those that a patient can control voluntarily—from contracting.

The process of voluntary muscle contraction begins when the brain sends a signal to a nerve cell, known as a neuron, that is linked to the muscle. See generally Thomas C. Westfall & David P. Westfall, *The Autonomic and Somatic Motor Nervous Systems*, *in* GOODMAN & GILMAN'S THE PHARMACOLOGICAL BASIS OF THERAPEUTICS 137, 145-153 (Laurence L. Brunton et al. eds., 11th ed., 2005). The signal travels down the neuron and triggers a series of chemical reactions that, in turn, lead to the release of

a neurotransmitter called acetylcholine. *Id.* When it reaches the muscle, acetylcholine docks at specialized receptors and initiates chemical and electrical changes in muscle cells that then cause the muscle to move. *Id.* at 152.

Neuromuscular blockers like pancuronium bromide do exactly what their name suggests: they block the nerve signals that cause muscular contraction. See, *e.g.*, Palmer Taylor, *Agents Acting at the Neuromuscular Junction and Autonomic Ganglia, in* GOODMAN & GILMAN'S THE PHARMACOLOGICAL BASIS OF THERAPEUTICS 217, 223 (Laurence L. Brunton et al. eds., 11th ed., 2005). Specifically, these drugs attach to the same receptors that acetylcholine uses to activate the muscle. *Id.* But, unlike acetylcholine, they do not trigger the reactions that cause the muscle to move. *Id.* Instead, the muscle remains still. *Id.* And, because neuromuscular blockers take up the space at the receptor for acetylcholine, they preclude it from activating the muscle. *Id.* It is a game of biochemical musical chairs in which the acetylcholine molecules are left standing. As a result, when a neuromuscular blocking agent is circulating in the body and the brain sends out a signal to activate a voluntary muscle—urging the diaphragm to move and the lungs to breathe, for example—nothing happens. Voluntary muscles are effectively paralyzed, tied down with an internal chemical restraint.

Neuromuscular blocking agents like pancuronium bromide affect only muscle movement. They have no effect at all on consciousness or pain. If neuromuscular blocking agents are used alone, the patient remains completely awake but totally unable to move.

Today, neuromuscular blocking agents like pancuronium bromide are used for limited purposes in clinical medicine. Anesthesiologists use them in the operating room, under careful monitoring, to relax head and neck muscles and ease the insertion of a breathing tube into the patient's trachea. See, *e.g.*, Alex S. Evers et al., *General Anesthetics*, *in* GOODMAN & GILMAN'S THE PHARMACOLOGICAL BASIS OF THERAPEUTICS 341, 363 (Laurence L. Brunton et al. eds., 11th ed., 2005). They are also used during surgery to immobilize an anesthetized patient. *Id.* Even an unconscious patient may make involuntary or reflex movements in response to stimuli during surgery, such as an incision or tissue manipulation, and such movement can be detrimental. Neuromuscular blockers paralyze the patient and ensure that she does not disrupt the surgery and inadvertently harm herself. Neuromuscular blocking agents also can be used in surgery to relax muscles, which avoids the need to use unsafe levels of anesthesia.

For critically ill patients, neuromuscular blocking agents may be used in a few narrow circumstances. For example, they may be used for brief periods to facilitate endotracheal intubation or for longer periods, "as a last resort," in mechanically-ventilated patients whose condition requires high ventilator settings. John P. Kress & Jesse B. Hall, *Principles of Critical Care Medicine*, *in* HARRISON'S PRINCIPLES OF INTERNAL MEDICINE 1583, 1584 (Dennis L. Kasper, et al. eds., 16th ed., 2005). By paralyzing the patient, physicians ensure that the machine controls the movement of breathing for the patient and works optimally.

When neuromuscular blocking agents are used in

these specific clinical contexts, "sedative-induced amnesia is mandatory." *Id.*; see also Brian Gehlbach & John P. Kress, *Pain Control, Sedation, and Use of Muscle Relaxants, in* PRINCIPLES OF CRITICAL CARE 165, 175 (Jesse B. Hall, et al. eds., 3rd ed., 2005). This is so because conscious paralysis—where the patient is awake and lucid but wholly unable to move—is terrifying. In other words, neuromuscular blocking agents can cause such profound distress that physicians *must* couple them with amnesiacs, sedatives, and analgesics to ensure that patients remain unaware of the entire experience.

Although neuromuscular blockers serve important purposes in their limited applications, one thing is clear: pancuronium bromide and drugs in its class are extremely dangerous. As a leading textbook on surgery explains,

> Neuromuscular blocking agents have no amnestic, hypnotic, or analgesic properties; patients must be properly anesthetized *prior to* and in *addition to* the administration of these agents. A paralyzed but unsedated patient will be aware, conscious, and in pain, yet be unable to communicate their predicament. Inappropriate administration of a neuromuscular blocking agent to an awake patient is one of the most traumatic experiences imaginable.

Robert S. Dorian, *Anesthesia of the Surgical Patient, in* SCHWARTZ'S PRINCIPLES OF SURGERY 1851, 1858 (F. Charles Brunicardi, et al. eds., 8th ed., 2005) (emphasis in original).

II. IT IS MEDICALLY AND ETHICALLY INAPPROPRIATE TO INTRODUCE NEUROMUSCULAR BLOCKING AGENTS LIKE PANCURONIUM BROMIDE IN END-OF-LIFE CARE

At the end-of-life stage, a physician's focus turns from curing or restoring health to ensuring patient comfort during the dying process. The physician has an obligation to provide care that relieves pain from physical, emotional, social, and spiritual sources.

This stage of patient care also brings with it special issues that relate to easing the distress of family members. Although the needs of the patient are, and must be, the physician's primary focus, a family-centered approach is often particularly important in end-of-life care. Families need to be informed of the patient's situation, supported in their grieving process, and assured that their loved one is not in pain.

This last need raises particular challenges because of the physical process the body undergoes at the end-of-life stage. When patients are nearing death, their bodies may twitch or convulse, or they may gasp loudly as if trying to breathe. Although these physical reactions are a normal part of the dying process, family members often interpret them as signs of suffering and may ask clinicians to stop these movements.

The medical ethics community has carefully evaluated the extent to which neuromuscular blocking agents may be administered to a dying patient to mask these physical signs and to ease the distress of family members. Established guidelines for critical care physicians, as well as the overwhelming consensus in the medical community,

provide that the introduction of neuromuscular blocking agents like pancuronium bromide in the dying process for this aesthetic purpose is both medically and ethically inappropriate. See, *e.g.*, Robert D. Truog, et al., *Recommendations for End-Of-Life Care in the Intensive Care Unit: The Ethics Committee of the Society of Critical Care Medicine*, 29 CRIT. CARE MED. 2332, 2344 (2001).

From a clinical perspective, administering a neuromuscular blocking agent to a terminal patient is inappropriate because there is no medical justification for the drug. In the end-of-life care setting, a physician's role is to relieve fully the patient's pain and suffering. Because neuromuscular blocking agents possess no sedative or analgesic properties, they do not produce actual comfort but only the appearance of comfort. Without a rationale linked to patient comfort, there is no medical reason for introducing neuromuscular blocking agents in a patient's dying process.

The administration of paralytic agents in the end-of-life context is inappropriate also because it introduces unacceptable risks of extreme pain and distress. As noted above, neuromuscular blocking agents paralyze the body's muscles, including the diaphragm and other muscles needed for breathing. Their administration to a dying patient therefore can cause that patient to suffocate to death.

In addition, neuromuscular blocking agents like pancuronium bromide can mask the signs of severe pain. When a patient is paralyzed, he is unable to display any of the behavioral cues that allow a physician to assess his pain levels. See *id.* at 2345. For example, the presence of a neuromuscular blocking agent will suppress the visual signs of acute

air hunger associated with the withdrawal of a ventilator as well as other signs of pain and suffering. *Ibid.* When the attending physicians cannot identify these signs of suffering, they cannot administer the further sedatives or analgesics that are needed to ensure the patient's comfort.

Other tools available for assessing pain, moreover, are insufficient substitutes for the patient's behavioral clues. For example, monitoring a patient's blood pressure or heart rate may give some sign of the patient's level of comfort, but these tests can be unreliable due to the physiologic instability of dying patients. Without physical signs such as grimaces or gasps, physicians, the most highly trained of a patient's caregivers, may be unable to provide an acceptable level of palliative care to their patients.

In light of these concerns arising from the administration of neuromuscular blocking agents, the Ethics Committee of the Society of Critical Care Medicine has concluded, consistent with the consensus in the medical community, that the risks to the patient are too great to justify administering neuromuscular blocking agents for the aesthetic purpose of easing family members' distress. See *ibid.* The standard of care instead requires doctors to communicate with family members about the convulsions or gasps that are part of the dying process and to treat any signs of pain and suffering with analgesics or sedatives. These conversations mitigate family distress without the severe risks to patient comfort associated with the use of neuromuscular blocking agents.

CONCLUSION

Because neuromuscular blocking agents serve no palliative function for a dying patient and pose severe risks to patient well-being in the end-of-life care setting, it is medically and ethically inappropriate to administer these drugs for aesthetic purposes.

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AMICUS CURIAE BRIEF

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1998 Ky. Acts ch. 220, § 1 (HB 27) 30

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James Bandler, *Fred Leuchter: Killing Time with Death's Efficiency Expert*, IN THESE TIMES, June 20-July 3, 1990, at 22 ..... 26, 27

STUART BANNER, THE DEATH PENALTY: AN AMERICAN HISTORY (2002) 5, 6, 9, 16

Tim Barker, *Author of Lethal Injection Bill Recalls His Motive*, TULSA WORLD, Sept. 7, 1990, at A1 17

Simon Berlyn, *Execution By the Needle*, NEW SCIENTIST, Sept. 15, 1977, at 676 20

Brief for Amicus Curiae Darick Demorris Walker Supporting Petitioner, *Hill v. McDonough*, No. 05-8794 (U.S. 2006) 36

Brief for Petitioners, *Baze v. Rees*, No. 07-5439 (U.S. 2007) 23, 28, 32, 33

Robbie Byrd, *Informal Talks Opened Door to Lethal Injection*, THE HUNTSVILLE ITEM, Oct. 4, 2007, *available at* http://www.itemonline.com/local/local_story_277004148.html 28

Capital Punishment, N.Y. TIMES, Dec. 17, 1887, at 4 8

Christopher Q. Cutler, *Nothing Less Than the Dignity of Man: Evolving Standards, Botched Executions and Utah's Controversial Use of the Firing Squad*, 50 CLEV. ST. L. REV. 335 (2003) 5

Consent Agreement, *Commonwealth v. Leuchter*, No. EN 90-102 (Mass. Dist. Ct. June 11, 1991) 27

Deborah W. Denno, *Getting to Death: Are Executions Constitutional?*, 82 IOWA L. REV. 319 (1997) 5, 9, 12, 24

Deborah W. Denno, *Is Electrocution an Unconstitutional Method of Execution? The Engineering of Death over the Century*, 35 WM. & MARY L. REV. 551 (1994) 26, 28

Deborah W. Denno, *The Lethal Injection Quandary: How Medicine Has Dismantled The Death Penalty*, 76 FORDHAM L. REV. 49 (2007) ..... *passim*

Deborah W. Denno, *When Legislatures Delegate Death: The Troubling Paradox Behind State Uses of Electrocution and Lethal Injection and What It Says About Us*, 63 OHIO ST. L.J. 63 (2002) ..... *passim*

Dr. Death and His Wonderful Machine, N.Y. TIMES, Oct. 18, 1990, at A24 26

Bill Estep, *House Committee Approves Lethal Injection*, LEXINGTON HERALD-LEADER, Jan. 9, 1998, at A1 ..... 30, 31

Bill Estep, *House Votes for Execution by Injection; Those Condemned May Have Choice in Form of Death*, LEXINGTON HERALD-LEADER, Jan. 15, 1998, at A1 30

"Expert" on Executions is Charged with Fraud, N.Y. TIMES, Oct. 24, 1990, at A14 27

Frank Green & Jamie C. Ruff, *Killer Executed for Mother's Day Slaying*, RICHMOND TIMES-DISPATCH (VA.), July 21, 2006, at A1 11

Michael D. Hinds, *Making Executions Humane (or Can It Be?)*, N.Y. TIMES, Oct. 14, 1990, at 1 ..... 27, 28

http://www.lrc.ky.gov/recarch/98rs/HB27.htm 30

Allen Huang, *Hanging, Cyanide Gas, and the Evolving Standards of Decency: The Ninth Circuit's Misapplication of the Cruel and Unusual Clause of the Eighth Amendment*, 74 OR. L. REV. 995 (1995) 12

Issues Confronting the 1998 General Assembly, Kentucky Legislative Research Commission (Sept. 1997) 29

Kevin Johnson, *Federal Warden Prepares for 'Unnatural' Job*, USA TODAY, May 8, 2001, at 4A 25

In re Kemmler, 7 N.Y.S. 145 (Cayuga County Ct. 1889) (Trial Transcript) 8

Jim Killackey, *Execution Drug Like Aesthesia*, DAILY OKLAHOMAN, May 12, 1977, at 1 20

Jim Killackey, *Officials Draw Grim Execution Scene*, DAILY OKLAHOMAN, Nov. 12, 1979, at 1 22

Lawmaker Wants Lethal Injection Offered as Execution Alternative, LEXINGTON HERALD-LEADER, Mar. 15, 1997, at C4 ..... 29, 30

Susan Lehman, *A Matter of Engineering: Capital Punishment As a Technical Problem*, ATLANTIC MONTHLY, Feb. 1990, at 26 26

JAMES W. MARQUART ET AL., THE ROPE, THE CHAIR, AND THE NEEDLE: CAPITAL PUNISHMENT IN TEXAS, 1923-1990 (1994) 8, 28

RAYMOND PATERNOSTER, CAPITAL PUNISHMENT IN AMERICA (1991) 9

Press Release, U.S. Dep't of Justice, Prisoner Executions Rise Significantly (Dec. 14, 1997), *available at* http://www.ojp.gov/ bjs/pub/press/cp96.pr 6

James Prichard, *Team Practices Lethal Injection*, LEXINGTON HERALD-LEADER, July 26, 1998, at B1 ..... 31, 32

REPORT OF THE COMMISSION TO INVESTIGATE AND REPORT THE MOST HUMANE AND PRACTICAL METHOD OF CARRYING INTO EFFECT THE SENTENCE OF DEATH IN CAPITAL CASES (1888) 8, 16

REPORT OF THE ROYAL COMMISSION ON CAPITAL PUNISHMENT 1949-1953 16

Ellyde Roko, Note, *Executioner Identities: Toward Recognizing a Right to Know Who Is Hiding Beneath the Hood*, 75 FORDHAM L. REV. 2791 (2007) 35

Tracy L. Snell, Bureau of Justice Statistics, Bureau of Justice Statistics Bull. No. NCJ 215083, Capital Punishment 2005 (2006), *available at* http://www.ojp.usdoj.gov/bjs/pub/pdf/cp05.pdf ..... *passim*

STEPHEN TROMBLEY, THE EXECUTION PROTOCOL: INSIDE AMERICA'S CAPITAL PUNISHMENT INDUSTRY (1992) 26, 27, 28

William J. Wiseman, Jr., *Confessions of a Former Legislator*, CHRISTIAN CENTURY, June 20-27, 2001, *available at* http://findarticles.com/p/articles/mi_m1058/is_19_118/ai_76512812 ..... 17, 18

INTEREST OF *AMICUS CURIAE*[1]

The Louis Stein Center for Law and Ethics is based at Fordham University School of Law. The Stein Center reflects the law school's commitment to teaching, legal scholarship, and professional service that promote the role of ethical perspectives in legal practice, legal institutions, and the historical and contemporary development of the law itself. For more than a decade, the Stein Center and affiliated Fordham Law faculty have examined the ethical and historical dimensions of the administration of the criminal justice system, particularly that of the death penalty. In this capacity, the Stein Center submitted an amicus brief to this Court in the case of *Bryan v. Moore*, 528 U.S. 960 (1999), *cert. dismissed as improvidently granted*, 528 U.S. 1133 (2000), which the Court had granted to consider whether electrocution violated the Eighth Amendment's Cruel and Unusual Punishments Clause.

The use of lethal injection as a method of execution raises a host of ethical questions important to the Stein Center that are enlightened by a review of the history of execution methods generally and lethal injection in particular. On the

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[1] Pursuant to Rule 37.3, the parties have consented to the filing of this brief. Letters of consent have been filed with the Clerk. No counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than *amicus curiae*, its members, or its counsel made a monetary contribution to its preparation or submission.

one hand, the history suggests, not surprisingly, a public consensus opposed to the infliction of severe pain in the course of executing individuals who were sentenced to death. On the other hand, the history raises doubts whether legal institutions, including state legislators, prison officials, and courts, have responded ethically to the serious and unnecessary risks associated with current lethal injection procedures.

INTRODUCTION AND SUMMARY OF ARGUMENT

This amicus brief's purpose is not to repeat the Petitioners' doctrinal argument that Kentucky's implementation of lethal injection violates the Eighth Amendment. Rather, the purpose of this brief is to set forth three historical propositions that are relevant to the Court's analysis of that issue.

(1) The history of execution methods in the United States demonstrates an evolving moral and legal consensus toward seeking out methods of execution that are humane and free from unnecessary pain. States have sought to introduce more humane methods of execution when the actual implementations of particular methods—e.g., hangings that failed to bring about death or caused decapitations, electrocutions that produced burning flesh, and slow asphyxiation in the gas chamber—were scrutinized and shown to be barbaric or open to a high risk of unnecessary error and pain relative to other available options.

(2) At one level, the current legislative trend towards the use of lethal injection was propelled by a search for a more humane alternative to the cruelty of existing execution methods. The historical evidence demonstrates, however, that lethal injection *as actually practiced* is not the result of informed deliberation or reasoned consensus. The three-drug lethal injection protocol first was developed in Oklahoma in 1977 without study or qualified scientific or medical input. Soon thereafter, state after state blindly followed Oklahoma's lead. Moreover, the responsibility for the essential details of implementing lethal injection—what drugs should be used, what dosage amount, who should administer the drugs and how—was delegated by state legislatures to uninformed prison personnel. Hidden from public scrutiny and oversight, state prison personnel were often guided by unqualified sources. Thus states—including Kentucky—developed and adopted the nearly ubiquitous three-drug lethal injection protocol and procedures quickly, haphazardly, and without relevant medical or scientific input.

(3) Several features of the history of lethal injection have led to the *continued* repression of genuine scrutiny of the procedure and its implementation. Historical and structural factors have largely shielded lethal injection from the kind of public scrutiny that has led states in the past to reform execution methods. Thus, while the prevalence of both the three-drug protocol and its flawed implementation might at first glance suggest

societal acceptance of the unnecessary risks that exist today, history exposes that premise as a fallacy. Although there is a consensus that the states should strive to make executions free from unnecessary pain and suffering, there is no reasoned consensus that current lethal injection procedures meet this goal. In this context, judicial scrutiny must ensure that states' administration of lethal injection eliminates the significant and unnecessary risk of serious pain.

ARGUMENT

I. THE HISTORY OF EXECUTION METHODS IN THE UNITED STATES DEMONSTRATES A SOCIETAL CONSENSUS IN FAVOR OF SEEKING OUT METHODS OF EXECUTION THAT ARE FREE OF SEVERE AND UNNECESSARY PAIN AND SUFFERING.

Lethal injection is the newest execution method in the United States. Its use began only in the last quarter of the twentieth century, after its creation by the State of Oklahoma in 1977. To fully understand the history of lethal injection in the United States, the development of the method must be viewed within a larger pattern that persisted throughout the twentieth century and continues to this day. As this Part demonstrates, states generally have sought to introduce more humane methods of execution once the actual implementations of pre-existing methods were scrutinized and shown to be too barbaric, flawed, or open to a high risk of painful or gruesome error relative to other available options. *See*

generally Deborah W. Denno, *When Legislatures Delegate Death: The Troubling Paradox Behind State Uses of Electrocution and Lethal Injection and What It Says About Us*, 63 OHIO ST. L.J. 63 (2002); STUART BANNER, THE DEATH PENALTY: AN AMERICAN HISTORY (2002).

As the last century and a half of American history shows, the introduction of each *seemingly* more humane execution method typically is followed by scrutiny of the new procedure's actual operation, and then by a growing societal awareness that the new method is not as humane as previously thought. This basic pattern can be seen in the historical trend in the United States from hanging, to electrocution, to the gas chamber, to lethal injection—the currently dominant method of execution.[2]

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[2] This Part does not discuss the firing squad because it was never widely adopted in the United States. No state currently relies on the firing squad and only Idaho, Utah, and Oklahoma still authorize the firing squad as an alternative to lethal injection under some limited circumstances. *See* Tracy L. Snell, Bureau of Justice Statistics, Bureau of Justice Statistics Bull. No. NCJ 215083, Capital Punishment 2005, 4 tbl. 2 (2006), *available at* http://www.ojp.usdoj.gov/bjs/ pub/pdf/cp05.pdf. The method, which may have gained limited popularity in those states because it was based on an early Mormon belief in "blood atonement," see Deborah W. Denno, *Getting to Death: Are Executions Constitutional?*, 82 IOWA L. REV. 319, 395 (1997), never gained broader traction, likely because of the barbaric images associated with it. *See generally* Christopher Q. Cutler, *Nothing Less Than the Dignity of Man: Evolving Standards, Botched Executions and Utah's Controversial Use of the Firing Squad*, 50 CLEV. ST. L. REV. 335 (2003). There has not been an

1. Hanging, a method of execution used since antiquity, was by the year 1853 "the nearly universal form of execution in the United States." *Campbell v. Wood*, 511 U.S. 1119 (1994) (Blackmun, J., dissenting from denial of *certiorari*). At that time, forty-eight states and territories imposed death via hanging. *Id.* By the late 1800s, however, a series of gruesomely botched public hangings—involving decapitations or slow strangulations—attended by thousands of spectators,[3] served as an impetus for a re-examination of hanging and a quest for "'whether the science of the present day'" could find a "less barbarous manner" of bringing about death. *In re Kemmler*, 136 U.S. 436, 444 (1890) (citation omitted). This quest led some states to turn their sights from the hangman's noose to the electric chair. *See, e.g., Malloy v. South Carolina*, 237 U.S. 180, 185 (1915) (noting that, at the time, twelve states had altered their method based on concerns of humaneness).

Other states maintained hanging, but sought to apply emerging insights of science and medicine to make hanging less painful, less prone to error, and more humane. Washington State, for example, retained hanging after nearly every other state had switched to the electric chair. When the

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execution by firing squad in the United States in over a decade. Press Release, U.S. Dep't of Justice, Prisoner Executions Rise Significantly (Dec. 14, 1997), *available at* http://www.ojp.gov/bjs/pub/press/cp96.pr.

[3] BANNER, *supra*, at 172-75 (describing "[b]ungled hangings [that] often caused intense pain and on occasion failed to kill").

constitutionality of Washington's procedure was later challenged, the United States Court of Appeals for the Ninth Circuit concluded that, despite the fact that a majority of states had abandoned hanging, Washington's use of the method was not cruel and unusual punishment because the state's hanging protocol, Field Instructions WSP 410.500, took multiple steps based on scientific study and the input of experts to minimize the risk of inhumane hanging deaths. *See Campbell v. Wood*, 18 F.3d 662, 684-685 (9th Cir. 1994) (en banc). Nevertheless, two years later, as a result of greater public awareness and deliberation as to the continuing risk of unnecessary pain and brutality of hanging, Washington State changed its default execution method from hanging to lethal injection.[4] Denno, 63 OHIO ST. L.J. at app. 2, at 205-206. States have now abandoned hanging.[5]

2. Most states moved more quickly than Washington to find a more humane method of execution than hanging. By the beginning of the twentieth century, the vast majority of states abandoned hanging for the electric chair. When the electric chair was first introduced in New York in 1888, prior to scrutiny of actual electrocutions, it was widely held up as a modern, technologically

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[4] Wash. Rev. Code Ann. § 10.95.180 (West 2007) (requiring lethal injection unless the inmate elects hanging).

[5] Only three inmates have been hanged since 1977 and no state uses hanging as its sole method. *See* Snell, *supra*, at 4 tbl. 2, app. at 17 tbl. 5.

advanced method of execution that employed science to ensure as quick and painless a death as possible. *See* REPORT OF THE COMMISSION TO INVESTIGATE AND REPORT THE MOST HUMANE AND PRACTICAL METHOD OF CARRYING INTO EFFECT THE SENTENCE OF DEATH IN CAPITAL CASES, at 80 (1888) [hereinafter NY COMM'N REPORT]. Before the first use of the electric chair, the NEW YORK TIMES deemed electrocution "euthanasia by electricity" in advocating its use over the "barbarity" of hanging. *Capital Punishment*, N.Y. TIMES, Dec. 17, 1887, at 4.[6] Even Thomas Edison testified at the time that electrocution would bring about "instantaneous" death. *See In re Kemmler*, 7 N.Y.S. 145 (Cayuga County Ct. 1889) (Trial Transcript at 636).

In the absence of any actual electrocutions to gauge the implementation of the method, this Court, in a case that preceded the application of the Eighth Amendment to the States, permitted the first execution by electric chair to proceed in 1890, recognizing New York's expressed motivation of finding a more humane method of execution. *In re Kemmler*, 136 U.S. at 447. After *Kemmler*, other states adopted the electric chair as a perceived humane alternative to hanging and other primitive methods of execution. Indeed, by the 1920s,

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[6] Similarly, when Texas, the most active capital state, abandoned hanging for electrocution in 1923, the "Texas legislators hoped to demonstrate that their state was in greater concord with evolving standards of decency." JAMES W. MARQUART ET AL., THE ROPE, THE CHAIR, AND THE NEEDLE: CAPITAL PUNISHMENT IN TEXAS, 1923-1990 at 18 (1994).

motivated by a growing national desire to develop a more humane execution method, more than half of the active death penalty states employed the electric chair. *See* RAYMOND PATERNOSTER, CAPITAL PUNISHMENT IN AMERICA 23 (1991).

Despite the fact that electrocution had replaced hanging throughout the country due to a stated desire to execute capital defendants in a more humane way, the public eventually learned that the reality of the electric chair did not meet this worthy goal. BANNER, *supra*, at 192-193. Widely reported accounts of gruesomely botched electrocutions led to broad public concern as to whether the electric chair, which in "grotesque" examples caused sparks and flames to emanate from the body, required multiple jolts over time to bring about death, or caused blood to spray from the nose or mouth, was the humane method of execution that originally it was thought to be.[7] Public scrutiny of electrocutions also intensified in light of this Court's decision in *Gregg v. Georgia*, 428 U.S. 153 (1976), which ended the nine-year execution hiatus that had begun in the period leading up to *Furman* v. *Georgia*, 408 U.S. 238 (1972).

With scrutiny came legislative change. The year 1949 was the last in which a state legislature switched to electrocution from another form of execution. Denno, 63 OHIO ST. L.J. at app. 2, at 206 tbl. 2. States once again began seeking out a new

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[7] *See* Denno, 82 IOWA L. REV. at app. 2.A at 413 (describing examples of botches).

method of execution that offered a more humane death to the condemned compared to the violence and pain of the electric chair. As discussed below, some states initially experimented with lethal gas while others moved to lethal injection.

Not only did legislatures reexamine electrocution, but courts also scrutinized the method's constitutionality. In 1999, this Court granted *certiorari* in a case challenging the constitutionality of the electric chair in Florida. *Bryan v. Moore*, 528 U.S. 960 (1999). Before the Court decided the case, however, as a result of public awareness of seriously botched electrocutions,[8] Florida altered its execution method so that an inmate could choose between electrocution and lethal injection. With this legislative change, the Court dismissed the writ as improvidently granted. 528 U.S. 1133 (2000). Electrocutions are now exceedingly rare. Only one state, Nebraska, currently relies solely on electrocution. Neb. Rev. Stat. § 29-2532 (2006).[9]

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[8] *See* Deborah W. Denno, *The Lethal Injection Quandary: How Medicine Has Dismantled The Death Penalty*, 76 FORDHAM L. REV. 49, 63 (2007) (describing the 1999 botched execution of Allen Lee Davis, whose brutal electrocution scars were witnessed by millions of people who viewed post-execution color photographs on the Florida Supreme Court's website).

[9] Seven states allow for a choice between electrocution and some other method, with some states limiting the choice to inmates sentenced before a certain date and other states allowing any inmate to choose between the methods. *See* Snell, *supra*, at 4 tbl. 2. One state permits electrocution only if lethal injection is held unconstitutional. *See id.* Although

3. As gruesome hangings and botched electrocutions brought increasing scrutiny to those execution methods, some states experimented, at least initially, with the gas chamber, believing that it offered a more humane method of death than other available alternatives. In 1921, Nevada, which had never adopted the electric chair, became the first state to authorize lethal gas. Denno, 63 OHIO ST. L.J. at 83. The state legislature made this switch because it "sought to provide a method of inflicting the death penalty in the most humane manner known to modern science." *State v. Gee Jon*, 211 P. 676, 682 (Nev. 1923). By 1955, ten additional states had adopted lethal gas, similarly out of humanitarian concern. Denno, 63 OHIO ST. L.J. at 83.

It was expected that lethal gas executions in Nevada would resemble relatively peaceful methods of killing animals using lethal gas. *See Gee Jon*, 211 P. at 681. But, as with previous execution methods, the reality of lethal gas hardly provided the sought-after humaneness. Eventually, the public learned that inmates did not die peacefully by breathing in lethal gas while sleeping. The gas chamber did not induce immediate unconsciousness and death, and inmates often urinated on themselves, moaned,

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electrocutions have become rare, as a result of growing awareness of the risk of severe pain from lethal injection, some inmates have recently chosen the electric chair. *See, e.g.*, Frank Green & Jamie C. Ruff, *Killer Executed for Mother's Day Slaying*, RICHMOND TIMES-DISPATCH (VA.), July 21, 2006, at A1.

twitched, and painfully convulsed for minutes before finally dying.[10] In addition, the gas chamber carried with it an enduring association to the abhorrent mass killings in Nazi Germany. Allen Huang, *Hanging, Cyanide Gas, and the Evolving Standards of Decency: The Ninth Circuit's Misapplication of the Cruel and Unusual Clause of the Eighth Amendment*, 74 OR. L. REV. 995, 1007-08 (1995).[11] In light of waning public support, lethal gas has all but disappeared. There have been only eleven lethal gas executions since 1977[12] and no state currently retains it as a sole method.[13]

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[10] *See, e.g., Gray v. Lucas*, 710 F.2d 1048, 1058-59 (5th Cir. 1983); *see also* Denno, 82 IOWA L. REV. at app. 2.B at 425.

[11] "To this day, the term 'gas chamber' continues to conjure images of the Nazi Party's use of lethal gas to kill millions of people during World War II. Although the Nazis used Zyklon-B rather than cyanide, the administration and procedure is virtually the same . . . ." Huang, *supra*, at 1008 n.125.

[12] *See* Snell, *supra*, app. at 17 tbl. 5.

[13] Three states allow for a choice between lethal gas and lethal injection, one state allows an inmate to chose lethal gas only if sentenced to death before a certain date, and one state provides for lethal gas if lethal injection is held unconstitutional. *See* Snell, *supra*, at 4 tbl. 2.

II. HISTORICAL EVIDENCE DEMONSTRATES THAT THE LETHAL INJECTION METHOD THAT KENTUCKY WILL USE TO EXECUTE PETITIONERS DOES NOT RESULT FROM SCIENTIFIC OR MEDICAL STUDY OR REASONED CONSIDERATION OF HOW TO IMPLEMENT THE METHOD WITHOUT SEVERE AND UNNECESSARY PAIN AND SUFFERING.

The historical framework just described provides the context for considering the three-drug lethal injection protocol used by most death penalty states, including Kentucky. Lethal injection is, at this historical moment, the prevalent method of execution in the United States. Thirty-eight states currently authorize the death penalty. Twenty-eight of those states require execution by lethal injection. *See* Denno, 76 FORDHAM L. REV. at 59 n.50 (providing comprehensive listing of state statutory provisions).[14] Nine of the thirty-eight death penalty states allow an inmate to choose between lethal injection and another method of execution—either electrocution, lethal gas, hanging, or the firing

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[14] Included among the twenty-eight states are those—like Kentucky—which specify that an inmate has a choice between lethal injection and another method only if he was sentenced to death before a certain date, as well as states that specify another method only if lethal injection is held unconstitutional. For detailed accountings of the statutory variations, see Denno, 63 OHIO ST. L.J. at app. 2 at 188-206; Snell, *supra*, at 4 tbl. 2.

squad.[15] *Id.* The remaining death penalty state, Nebraska, uses only electrocution.[16]

Of the thirty-seven states that use lethal injection, nearly every one employs a similar three-drug protocol: (1) a short-acting anesthetic, typically sodium thiopental, (2) a muscle paralyzer, usually pancuronium bromide,[17] and (3) potassium chloride, an excruciatingly painful drug that causes death by stopping the heart. Denno, 76 FORDHAM L. REV. at 96 n.318 (listing available state-by-state information on protocols).[18]

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[15] Not included among the nine "choice" states are those that allow an inmate to choose an alternative method only if sentenced to death prior to a certain date or that specify another method only if lethal injection is held unconstitutional. *See supra* n.14.

[16] *See* Neb. Rev. Stat. § 29-2532 (2006). The state has conducted three electrocutions since 1977. *See* Snell, *supra*, app. at 17. However, the Supreme Court of Nebraska currently is reviewing the constitutionality of electrocution. *See State v. Moore*, 730 N.W.2d 563, 564 (Neb. 2007) (staying an execution until the court could consider electrocution's constitutionality in another case on its docket).

[17] While most states use pancuronium bromide as the paralytic agent, Oklahoma, where this three-drug combination was first developed, *see infra* Part II.A.1-2, switched in recent years to using vecuronium bromide, a compound indistinguishable from pancuronium. Denno, 76 FORDHAM L. REV. at 97 n.320.

[18] The exceptions appear to be New Hampshire and New Jersey. New Hampshire, a state that has not executed anyone in decades and has never executed anyone by lethal injection, does not have a specific protocol. Denno, 76 FORDHAM L. REV. at app. at 126. New Jersey, which has had a *de jure* and *de facto* moratorium on executions for years, has a protocol that calls for

To the extent that the pervasiveness of lethal injection, and, in particular, the three-drug lethal injection protocol, suggests independent, state-by-state legislative evaluation of the method, history tells a dramatically different story. The historical evidence demonstrates that states adopted the nearly ubiquitous three-drug lethal injection protocol quickly and haphazardly. In so doing, they engrained a seemingly modern, scientific method of execution without conducting any relevant medical or scientific study or soliciting input from appropriate experts.

Oklahoma was the first state to adopt a lethal injection protocol, in 1977. Almost immediately thereafter, state after state—including Kentucky—uncritically copied Oklahoma's procedure. This historical process was succinctly described by the trial court in this case:

> There is scant evidence that ensuing States' adoption of lethal injection was supported by any additional medical or scientific studies that the adopted form of lethal injection was an acceptable alternative to other methods. Rather, it is this Court's impression that the various States simply fell in line relying solely on Oklahoma's protocol . . . in drafting and approving a lethal

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only two drugs, thiopental and potassium chloride. *See* Denno, 63 OHIO ST. L.J. at app. 2 at 232.

> injection protocol. Kentucky is no different.

JA 755-56.

This Part details this historical development of lethal injection in the United States.

A. The Historical Development of Lethal Injection Protocols Nationally.

1. Oklahoma's Lethal Injection Legislation

As scholars and courts consistently have recognized, lethal injection as currently practiced in the United States was born in Oklahoma in 1977. *See, e.g.*, Denno, 76 FORDHAM L. REV. at 65; BANNER, *supra*, at 297; JA 755; *Beardslee v. Woodford*, 395 F.3d 1064, 1073 (9th Cir. 2005). What is less known, however, is that prior to Oklahoma's adoption of lethal injection, variations of the practice were earlier considered and rejected by those who engaged in careful study. *See* N.Y. COMM'N REPORT, *supra*, at 75 (1888 Report describing the New York Commission's two-year study and conclusion that, based upon the procedures available at the time and as a result of objections from the medical profession, cyanide injection should be rejected as a substitute for hanging); REPORT OF THE ROYAL COMMISSION ON CAPITAL PUNISHMENT 1949-1953 at 257, 261 (describing 5-year study in the 1950s of the United Kingdom's death penalty system and the Commission's conclusion, based on medical and scientific input concerning the feasibility of lethal injection and its administration at the time, that

there was a lack of "reasonable certainty" that lethal injection executions could be carried out "quickly, painlessly and decently").

The process that led to Oklahoma's adoption of lethal injection in 1977 stands in stark contrast to the extensive medical input and study of practical administration issues that marked the earlier deliberations undertaken by the New York and British commissions. As explained below, the Oklahoma "process"—though motivated by a desire for a more humane execution procedure—was devoid of meaningful scientific and medical study.

The modern legislative reform effort toward lethal injection began in Oklahoma in 1976—the year this Court's decision in *Gregg* v. *Georgia* allowed capital punishment to proceed. The post-*Gregg* move toward lethal injection was spearheaded by two members of the Oklahoma state legislature: State Representative Bill Wiseman and State Senator Bill Dawson. Both of these legislators were concerned about the inhumanity, visceral brutality, and cost of the then-current execution method, electrocution.[19] They therefore sought to propose an alternative, more humane method of execution.

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[19] *See* Denno, 76 FORDHAM L. REV. at 66; *see also* William J. Wiseman, Jr., *Confessions of a Former Legislator*, CHRISTIAN CENTURY, June 20-27, 2001, at 6, *available at* http://findarticles.com/p/articles/mi_m1058/is_19_118/ai_76512812 ("I would make the death penalty more humane by eliminating the brutality and violence of electrocution."); Tim Barker, *Author of Lethal Injection Bill Recalls His Motive*, TULSA WORLD, Sept. 7,

Unable to secure assistance from the Oklahoma Medical Association, Wiseman and Dawson turned to A. Jay Chapman, Oklahoma's chief medical examiner at the time. Denno, 76 FORDHAM L. REV. at 65-66. Chapman agreed to assist the legislators despite his admitted dearth of relevant expertise. Indeed, Chapman commented when the legislators approached him that he "'was an expert in dead bodies but not an expert in getting them that way.'" *Id.* at 66. Nevertheless, Chapman met with Wiseman and soon thereafter hastily dictated a method of execution as follows:

> An intravenous saline drip shall be started in the prisoner's arm, into which shall be introduced a lethal injection consisting of an ultra-short-acting barbiturate in combination with a chemical paralytic.

Id. at 66-67; *see also* Wiseman, *supra* n.19, at 7.

The first category of drug Chapman included, an "ultra-short-acting barbiturate," is an anesthetic that can act quickly to cause a low-level of unconsciousness. The second category of drug, "a chemical paralytic," sometimes referred to as a "neuromuscular blocking agent," paralyzes the body's muscles. According to Chapman, he

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1990, at A1. Oklahoma had adopted lethal gas as an execution method in 1951, provided, however, that electrocution would be used until the state could build a gas chamber, which it never did. *See* Denno, 63 OHIO ST. L.J. at app. 2 at 201 n.121.

suggested sodium thiopental as the ultra-short-acting barbiturate and chloral hydrate as the paralytic. Denno, 76 FORDHAM L. REV. at 67. Although these specific drugs apparently were considered and discussed with Chapman at the time, the legislators chose instead to propose vague statutory language, which specified neither specific drugs nor doses. *Id.* They did so because they were uncertain how much time would pass before a lethal injection execution would be carried out and thus contemplated that drug technology might advance by that time. *See id.* In effect, the result of this decision was the delegation to Oklahoma prison officials of all critical decisions regarding the implementation of lethal injection.

Dawson also sought input from Stanley Deutsch, the head of the Oklahoma Medical School's Anethesiology Department. *Id.* According to Deutsch, the consultation consisted of a single telephone conversation, followed by a letter from Deutsch recommending drug types and quantities that could be used for the "combination of ultra short acting barbiturate and neuromuscular blocking drugs." *Id.* For the ultra-short-acting barbiturate, Deutsch suggested "Thiopental (Pentothal) or Methohexital (Brevital) in quantities of 2000mg." For the neuromuscular blocking drug (the paralytic agent), Deutsch recommended Succinylcholine, in a dose of 1000 mg, or a 20mg dose of either pancuronium or decamethonium. *Id.* at 67-68. The most detailed and updated historical analysis indicates that Deutsch's letter was dated *after*

introduction of the lethal injection bill and only two days prior to passage of the bill in the state senate. *Id.* No specific drug types or quantities, such as those proposed by Deutsch, were included in the legislation.

These two consultancies were the sum total of research conducted by Wiseman and Dawson into an execution method to replace the electric chair in Oklahoma. No historical evidence suggests that Wiseman, Dawson, Chapman, or Deutsch consulted any other doctors or scientists, conducted any studies, or considered any of the available evidence concerning the risks and dangers of lethal injection. *Id.* at 65, 70. Yet the lethal injection procedure that they were proposing had dangers that were foreseeable even in 1977. *See, e.g.*, Simon Berlyn, *Execution By the Needle*, NEW SCIENTIST, Sept. 15, 1977, at 676-77 (describing the likely dangers of a lethal combination of a fast-acting barbiturate and a chemical paralytic, including the "terrifying possibility . . . that if an insufficient dose of barbiturates were given in execution," together with a paralytic, "a conscious victim would be unable to convey an experience of intense suffering"). But it was not until after the proposed method had been enacted into Oklahoma law that Chapman went on record discussing its potential dangers. *See* Jim Killackey, *Execution Drug Like Anesthesia*, DAILY OKLAHOMAN, May 12, 1977, at 1 ("Dr. A. Jay Chapman, state medical examiner, said that if the death-dealing drug is not administered properly, the

convict may not die and could be subjected to severe muscle pain.").

The Oklahoma lethal injection bill introduced in early 1977 precisely tracked Chapman's early formulation. The statutory language read:

> The punishment of death must be inflicted by continuous, intravenous administration of a lethal quantity of an ultrashort-acting barbiturate in combination with a chemical paralytic agent until death is pronounced by a licensed physician according to accepted standards of medical practice.

An Act Relating to Criminal Procedure; Amending 22 O.S. 1971, Section 1014; and Specifying the Manner of Inflicting Punishment of Death, S.B. 10, 36th Leg., 1st Sess. (Okla. 1977).

The bill moved forward quickly, picking up broad support not only because of the concern for humaneness, but also because of economics. The renovation of the state's damaged electric chair was estimated to cost $50,000 and the construction of a gas chamber was estimated to cost upwards of $250,000. In contrast, Dawson noted that each execution by lethal injection would cost approximately $10. Denno, 76 FORDHAM L. REV. at 71. The bill passed the Oklahoma State Senate on March 3, 1977 and the Oklahoma House of Representatives on May 9, 1977. It was signed into law on May 10, 1977, making Oklahoma the first

state to authorize execution by lethal injection. Okla. Stat. Ann. tit. 22, § 1014 (West 2006).

2. Oklahoma's Lethal Injection Protocol

As noted above, Oklahoma's statutory description of lethal injection was purposefully vague. *See* Jim Killackey, *Officials Draw Grim Execution Scene*, DAILY OKLAHOMAN, Nov. 12, 1979, at 1. With this vagueness, the legislature effectively delegated to the Department of Corrections the responsibility for determining how precisely to carry out a lethal injection execution—what drugs to use, what dosage, who would administer the drugs and how. *See* Denno, 63 OHIO ST. L.J. at 69. This ad hoc process required no specific implementation procedures, no record-keeping, no reporting, no studies, no vetting of experts—in other words, no oversight of any kind.

Free from scrutiny, Chapman again became the key player. In 1978 and 1981, Chapman assisted officials in developing the details of the protocol. Denno, 76 FORDHAM L. REV. at 73-75. Although a humane method of execution was the driving force behind Oklahoma's legislative change, it does not appear to have been Chapman's motivation. Questioned on why he recommended the drugs that he did, Chapman has responded by focusing on the crime victims he had seen as the State's chief medical examiner:

> Perhaps hemlock is the answer for all the bleeding hearts who completely forget about the victims—and their

> suffering—Socrates style. The things that I have seen that have been done to victims is [sic] beyond belief. And we should worry that these horses' patoots should have a bit of pain, awareness of anything—give me a break.

Id. at 74 n.151.

It was in the course of Chapman's behind-the-scenes work with the department of corrections that a third drug, potassium chloride, was added to the two-drug mix that Chapman had first recommended. *Id.* at 74. Potassium chloride, also known as rock salt, is a chemical often used to melt ice. In humans, it works to stop the heart. If an inmate receiving potassium chloride is not sufficiently anesthetized before receiving the drug, it is undisputed that he will suffer excruciating pain prior to death. Brief for Petitioners at 11-12, *Baze v. Rees*, No. 07-5439 (U.S. 2007). Moreover, the second drug—the paralytic agent—serves no purpose other than to paralyze the inmate, masking any expression of pain.

3. Other States Copied Oklahoma's Legislation

Despite the unstudied way in which lethal injection was developed in Oklahoma, a ripple effect soon occurred. State after state followed Oklahoma's lead and legislatively adopted lethal injection. Texas, Idaho, and New Mexico followed almost immediately.[20] Within four years, five states had

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[20] *See* 1977 Tex. Gen Laws 138 § 1 (switching from electrocution to lethal injection); 1978 Idaho Sess. Laws 70 § 1 (switching

switched to lethal injection. That progression continued steadily:

> From 1977 to 2002, thirty-seven states adhered to this adoption pattern, switching to lethal injection in a fast-moving cascade of multi-state clusters, indicating that shared forces and communications fueled legislative action.

Denno, 76 FORDHAM L. REV. at 78; *see also* Denno, 82 IOWA L. REV. at 408, app. 3 at 439 tbl. 7.

Far more significant than the fact that a parade of states followed Oklahoma and switched to lethal injection, however, is that the states making this change simply mirrored Oklahoma's vague legislative approach and drug combination choices without conducting any independent studies or research. As the trial court found: "[T]here is scant evidence that ensuing States' adoption of lethal injection was supported by any additional medical or scientific studies . . . [Rather] the various States simply fell in line relying solely on Oklahoma's protocol." JA 755-56; *see also Beardslee*, 395 F.3d at 1074 n.11 (noting that "[t]he history of the use of the three chemical protocol gives some force to [the] argument that . . . the precise protocol was never subjected to the rigors of scientific analysis"); *Evans v. State*, 914 A.2d 25, 76-77 & n.17 (Md. 2006)

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from hanging to lethal injection); 1979 N.M. Laws 150 § 8 (switching from lethal gas to lethal injection).

(noting that Maryland's statutory language is "nearly identical" to the states that previously switched to lethal injection and that at least twenty-four states use the same three-drug combination rooted in Oklahoma); Denno, 76 FORDHAM L. REV. at 79.

Thus, Oklahoma's hurriedly devised legislation and protocol became the basis for lethal injection in nearly every death penalty state in the country without ever being subjected to critical analysis.[21]

4. Other States' Protocols

Importantly, because states consistently have copied Oklahoma's vague lethal injection legislation, they also, like Oklahoma, have delegated the task of creating specific execution procedures to unqualified prison personnel. *See* Denno, 63 OHIO ST. L.J. at 66. In deciding what drugs to use, what dosage to administer, and other implementation procedures, many prison officials across the country borrowed from the Oklahoma protocol that had been crafted by the admitted non-expert, Chapman.

Even more remarkably, other states filled the legislative void with guidance from Fred Leuchter,

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[21] The federal government also executes by lethal injection and delegated the task of designing the protocol to Federal Bureau of Prisons officials. *See* 28 C.F.R. § 26.3(a)(4) (2007). In preparation for the execution of Timothy McVeigh in 2001, federal prison officials attended four state lethal injection executions and adopted the same three-drug protocol. *See* Kevin Johnson, *Federal Warden Prepares for 'Unnatural' Job*, USA TODAY, May 8, 2001, at 4A.

commonly referred to as "Dr. Death." *See, e.g., Dr. Death and His Wonderful Machine*, N.Y. TIMES, Oct. 18, 1990, at A24. After *Gregg* and until approximately 1990, Leuchter—a man with no medical, scientific, or engineering background—dominated the execution "business" in the United States. During that time period, Fred A. Leuchter Associates, Inc. was the only commercial provider of execution equipment and training in the country. *See* Susan Lehman, *A Matter of Engineering: Capital Punishment As a Technical Problem*, ATLANTIC MONTHLY, Feb. 1990, at 26; Deborah W. Denno, *Is Electrocution an Unconstitutional Method of Execution? The Engineering of Death over the Century*, 35 WM. & MARY L. REV. 551, 626 (1994). Leuchter became the country's primary "expert" in designing execution technology, including gallows, electric chairs, gas chambers, and, eventually, lethal-injection machines. *See* STEPHEN TROMBLEY, THE EXECUTION PROTOCOL: INSIDE AMERICA'S CAPITAL PUNISHMENT INDUSTRY 3-94 (1992); James Bandler, *Fred Leuchter: Killing Time with Death's Efficiency Expert*, IN THESE TIMES, June 20-July 3, 1990, at 22.

Between 1979 and 1990, Leuchter either consulted with or provided execution equipment to at least twenty-seven states. Denno, 35 WM. & MARY L. REV. at 627 n.496. A large number of those states relied upon Leuchter to guide their administration of lethal injection, despite the fact that he had no relevant expertise. For example, New Jersey hired Leuchter to provide guidance on lethal injection

"only because [he] built the electric chair helmet for South Carolina." TROMBLEY, *supra*, at 76. Nonetheless, over time Leuchter developed and profited from a "lethal injection machine," which further engrained the three-drug protocol. *Id.* at 79.

Leuchter's dominant influence came to an abrupt halt in 1990 after it was revealed that he had lied about having engineering credentials, a revelation that ultimately resulted in Leuchter being charged with criminal fraud.[22] *An "Expert" on Executions is Charged with Fraud*, N.Y. TIMES, Oct. 24, 1990, at A14. This information did not surface because state department of corrections officials seriously probed Leuchter's claimed credentials—they did not. Rather, it came out during Leuchter's testimony in support of Holocaust-denier Ernst Zundel, who was on trial in Canada for violating Canada's "spreading false news" prohibition. *See* Bandler, *supra*,, at 22. When Leuchter testified that the Nazis could not have used gas chambers for mass exterminations in concentration camps, the prosecutor exposed that Leuchter had fabricated his engineering credentials. *Id.* This led Massachusetts to charge Leuchter with fraud, after which states quickly distanced themselves from any relationship with him. *See*

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[22] In June 1991, Leuchter pled guilty and signed a consent decree acknowledging that he had falsely represented himself as an engineer to various state correctional departments. Consent Agreement at 1, *Commonwealth v. Leuchter*, No. EN 90-102 (Mass. Dist. Ct. June 11, 1991).

Michael D. Hinds, *Making Execution Humane (or Can It Be?)*, N.Y. TIMES, Oct. 14, 1990, at 1.

One state that Leuchter advised was Texas, Denno, 35 WM. & MARY L. REV. at 627 n.496, where the first lethal injection execution occurred. Although Texas veterinarian Dr. Gerry Etheredge had advised prison officials to use the single-drug method regularly employed in animal euthanasia, an overdose of an anesthetic,[23] Texas abandoned this recommendation before it carried out its first execution. Using the three-drug Oklahoma formulation, Texas executed Charles Brooks, Jr. on December 7, 1982. *See* TROMBLEY, *supra*, at 75 (reporting that the Texas warden mistakenly mixed all three drugs into a single syringe, causing the mixture to turn into "white sludge"); *see also* MARQUART ET. AL., *supra*, at 143.

While a quarter-century has passed since Brooks' execution, state prison officials continue to use the same lethal injection method and botch executions. Officials stab at inmates, trying to find suitable veins; intravenous lines infiltrate, sending the lethal chemicals into the tissue instead of the bloodstream; and inmates gasp and convulse, apparently in pain. *See, e.g.*, Denno, 63 OHIO ST. L.J. at app. 1 at 139-42 tbl. 9; Brief for Petitioners at 20-24. Evidence of such pain, visible only when not masked by the paralyzing effects of pancuronium bromide,

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[23] *See* Robbie Byrd, *Informal Talks Opened Door to Lethal Injection*, THE HUNTSVILLE ITEM, Oct. 4, 2007, *available at* http://www.itemonline.com/local/local_story_277004148.html.

contradicts the original legislative conception of a humane execution.

B. The Historical Development of Kentucky's Lethal Injection Protocol.

As the trial court observed, "Kentucky is no different" from other states adopting lethal injection; in 1998, Kentucky "simply fell in line relying solely on Oklahoma's protocol." JA 755-76. Despite a stated goal of searching for the most humane execution method available, Kentucky—like other states—reflexively and unquestioningly adopted the three-drug protocol without performing any independent study or analysis. And, like other states, Kentucky delegated responsibility for creating lethal injection procedures to unqualified and unaccountable prison officials.

Until 1998, electrocution was the sole method of execution authorized under Kentucky law. Ky. Rev. Stat. Ann. § 431.220 (LexisNexis 1996). At that time, Kentucky was one of only six states that relied solely on electrocution, whereas 32 of the 38 capital punishment states provided for lethal injection either solely or as an alternative method. *Issues Confronting the 1998 General Assembly*, Kentucky Legislative Research Commission (Sept. 1997), at 98.

In anticipation of the 1997 execution of Harold McQueen—the first execution in Kentucky in thirty-five years—Kentucky legislators considered a bill to replace electrocution with lethal injection, which was viewed as a humane alternative. *Lawmaker Wants*

Lethal Injection Offered as Execution Alternative, LEXINGTON HERALD-LEADER, Mar. 15, 1997, at C4. As the bill's sponsor, State Representative Mike Bowling explained: "'[I]f we are going to do capital punishment, it needs to be done in the most humane manner.'" *Id.*

McQueen was executed by electrocution in July 1997, before the full legislature acted upon the lethal injection bill. Bill Estep, *House Committee Approves Lethal Injection*, LEXINGTON HERALD-LEADER, Jan. 9, 1998, at A1. Nonetheless, the Kentucky legislature overwhelmingly passed the lethal injection bill in early 1998. Bill Estep, *House Votes for Execution by Injection; Those Condemned May Have Choice in Form of Death*, LEXINGTON HERALD-LEADER, Jan. 15, 1998, at A1. The Kentucky Senate approved the measure by an equally decisive vote of 34-2-1. *See* http://www.lrc.ky.gov/recarch/98rs/HB27.htm.

The Kentucky measure was signed into law on March 31, 1998 and mandated that all future sentences of death proceed by lethal injection. Ky. Rev. Stat. Ann. § 431.220(1) (West 2006); 1998 Ky. Acts ch. 220, § 1 (HB 27). That same legislation provided that all previously imposed sentences of death proceed by lethal injection unless the inmate chooses electrocution. Ky. Rev. Stat. Ann. § 431.220(1) (West 2006).

The 1998 legislation did not specify a lethal injection protocol. Rather, like other states, the Kentucky statute employed general language,

effectively delegating the particulars to prison officials:

> Except as provided in paragraph (b) of this subsection, every death sentence shall be executed by continuous intravenous injection of a substance or combination of substances sufficient to cause death. The lethal injection shall continue until the prisoner is dead.

Id. § 431.220(1)(a).[24]

The then-Warden of the Kentucky State Penitentiary, Philip Parker, ultimately instituted the lethal injection protocol for Kentucky. JA 756; Brief for Petitioners at 13. The process for creating that protocol was anything but scientific. Soon after the bill was signed into law—if not earlier—Parker and other Kentucky officials simply settled on the same three drugs they believed were being used by the many states relying on Oklahoma's 20-year old protocol: sodium thiopental, pancuronium bromide, and potassium chloride. JA 760-61, 139-42, 157, 225-27; James Prichard, *Team Practices Lethal Injection*, LEXINGTON HERALD-LEADER, July 26, 1998, at B1 (describing "run-throughs" of lethal injections held by Parker and his "execution team" since early 1998); Estep, Jan. 9, 1998, *supra*, at A1 (prior to the

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[24] The 1998 legislation also expressly forbade any involvement by physicians in executions "except to certify cause of death provided that the condemned is declared dead by another person." *Id.* § 431.220(3).

enactment of the lethal injection bill, Kentucky officials already were "drawing up procedures to carry out an execution by lethal injection" based on information from other states). In parroting other states' procedures, Kentucky officials "did not conduct any independent scientific or medical studies or consult any medical professionals concerning the drugs and dosage amounts to be injected into the condemned." JA 760. Indeed, the officials who created Kentucky's protocol did not and do not understand the purpose and effect of the three-drug combination. JA 73, 142, 159-60, 214-15.

Not only did Kentucky officials fail to engage in a deliberative process in developing the state's lethal injection protocol, but they, like officials from other states, also failed to acquire or train personnel who were qualified to administer the protocol. *See generally* Brief for Petitioners at 12-20, 45-50. Instead, then-Warden Parker formed an "execution team" of prison staff members—none a doctor or nurse—to perform lethal injections. Prichard, July 26, 1998, *supra*, at B1. The team members, including Parker, determined that the intravenous needle insertion posed difficulties and caused pain. *Id.* Indeed, "[o]n one occasion in which Parker himself volunteered for the test, the needle being placed into his arm went through the intended vein, sending a saline solution into the tissue and causing the warden some pain for a couple of days." *Id.*

Given that Kentucky has delegated control of the lethal injection process to manifestly unqualified

officials and personnel, it is no surprise that the state's actual implementation of lethal injection is rife with grave, yet preventable risks. *See generally* Brief for Petitioners at 12-20, 45-50. Moreover, state prison officials have failed to implement appropriate changes in their lethal injection protocol, either before or since the present litigation. When prison officials tweaked Kentucky's lethal injection protocol after this litigation was initiated, they again failed to consult a relevant expert or provide any medical justification. JA 760-61. The changes made by prison officials—giving the "execution team" more time to establish intravenous access and the ability to administer additional barbiturate if deemed necessary by the Warden, within his sole discretion—merely reinforce that the state's unwarranted reliance on untrained, unaccountable personnel is seriously misplaced. *See* Brief for Petitioners at 14-15 (describing the risks created by allowing extended time for establishing intravenous access); *id.* at 18 (describing the Warden's lack of understanding of anesthetization).

III. IMPORTANT ASPECTS OF THE HISTORY OF LETHAL INJECTION IN THE UNITED STATES CONTINUE TO HINDER INFORMED PUBLIC SCRUTINY ABOUT THE METHOD AND ITS HUMANENESS.

1. As the history detailed above demonstrates, at the time that state legislatures, including Kentucky's, enacted lethal injection legislation, they failed to engage in reasoned consideration of how to

implement the procedure so as to minimize the risks of unnecessary pain or suffering. Despite a legislative goal of implementing executions in a humane and less painful manner, states did not consult relevant medical or scientific experts, they did not engage in or commission studies, and they did not consider existing information regarding the dangers of improper drugs and administration. Nor did they require even minimal qualifications or training of personnel who would conduct the executions. Rather, following Oklahoma's lead, states enacted lethal injection in a vacuum of scrutiny where flawed procedures fester.

Moreover, several features of the history of lethal injection have led to the *continued* repression of public scrutiny of the procedure and its implementation. *First*, by copying Oklahoma's vague statutory language and three-drug protocol, other states were led to mirror Oklahoma's delegation to unqualified prison officials of the responsibility for creating specific lethal injection procedures. Denno, 63 OHIO ST. L.J. at 65, 69. Such delegation has caused problems nationwide. Some states turned to unqualified "experts" in execution methods, such as Leuchter. *See supra* Part II.A.3. Recently, litigation in Missouri uncovered the fact that the state had no written protocol. *Taylor v. Crawford*, No. 05-4173-CV-C, 2006 WL 1779035, at *7 (W.D. Mo. June 26, 2006), *rev'd*, 487 F.3d 1072 (8th Cir. 2007), *cert. pending*. In Kentucky, such delegation resulted in the creation of procedures by prison officials who admitted they lacked the

knowledge to make such decisions. *See supra* Part II.B.

Prison officials' creation of these procedures often has been considered exempt from the requirements of state administrative law, thus shielding the procedures from public analysis and comment. *See, e.g.*, *Hill v. McDonough*, 126 S. Ct. 2096, 2100 (2006) (noting that Florida's policies for implementing lethal injection "appear exempt from Florida's Administrative Procedure Act"); *see also Bowling v. Ky. Dep't of Corr.*, No. 06-CI-00574 (Ky. Franklin Cir. Ct. Dec. 27, 2006) (vacating a previous decision holding that lethal injection procedures were subject to administrative enactment procedures). As a result, prison officials' determinations of how to implement lethal injection largely have remained hidden from public scrutiny.

Second, to the extent that states have developed specific protocols, an extremely high level of secrecy surrounds such protocols and their administration, frustrating attempts to evaluate them. *See* Denno, 76 FORDHAM L. REV. at 95, *see also* Ellyde Roko, Note, *Executioner Identities: Toward Recognizing a Right to Know Who Is Hiding Beneath the Hood*, 75 FORDHAM L. REV. 2791, 2817 (2007) (arguing that the public and courts must know whether individuals carrying out lethal injections possess the necessary qualifications). States' efforts to conceal execution procedures include restricting witnesses to viewing only limited portions of the process. *See, e.g.*, *Cal. First Amendment Coal. v. Woodford*, 299

F.3d 868, 870-71 (9th Cir. 2002) (holding that prison officials could not justify restrictions on witnesses' viewing certain parts of an execution).[25]

States resist public disclosure of their execution procedures not only in general information requests, but also in litigation itself. *See, e.g.*, *Hill*, 126 S. Ct. at 2100 ("Hill requested information about the lethal injection protocol, but the department provided none"); *Nelson v. Campbell*, 541 U.S. 637, 641 (2004) (noting that the inmate's counsel had requested a copy of the protocol, but that the warden denied the request); *see also* Brief for Amicus Curiae Darick Demorris Walker Supporting Petitioners at 5, *Hill v. McDonough*, No. 05-8794 (U.S. 2006) (detailing strenuous efforts by Virginia to shield its execution procedures from disclosure during the course of litigation). Even when courts force states to provide inmates information regarding execution protocols, many courts allow this information to be kept under seal and impose extremely restrictive protective orders on inmates' counsel, at the states' insistence. *See id.* Indeed, the Kentucky protocol at issue here is under seal.

States also have long attempted to insulate their protocols from genuine evaluation by hiding behind the similarities among states. States regularly point

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[25] *See also* Denno, 63 OHIO ST. L.J. at 124 (finding that states often prevent witnesses from viewing various parts of the execution, such as the insertion of the intravenous lines, and noting that no state had embraced the Ninth Circuit's holding in *California First Amendment Coalition*).

to consistency among state protocols—particularly the use of the three-drug combination—to attempt to forestall inquiry into the merits of those protocols. *See, e.g.*, *Workman v. Bredesen*, 486 F.3d 896, 907 (6th Cir. 2007), *cert. denied*, 127 S. Ct. 2160 (2007). Such circular logic is faulty, however, because, as the above-described history shows, states use similar protocols because they copied Oklahoma, not because they independently investigated how to implement lethal injection and separately arrived at the same conclusion.

Third, the very nature of the second drug in the three-drug sequence masks the grim realities of the procedure from meaningful public scrutiny. Because the second drug used in nearly all lethal injection executions is an unnecessary paralytic agent, an inmate suffering pain during the process will be physically unable to express his agony. *See Morales v. Tilton*, 465 F. Supp. 2d 972, 975, 980 (N.D. Cal. 2006); *see also* Denno, 76 FORDHAM L. REV. at 55-56. Therefore, witnesses—including members of the media who inform the public about state executions—see a highly sanitized version of the procedure's painful realities.

2. The relative lack of scrutiny and transparency regarding lethal injection is beginning to change. As a result of recent litigation—and, in particular, the existence of constitutional judicial oversight—states have been forced to provide details about their development and implementation of lethal injection. These disclosures finally are permitting the sort of

deliberation and investigation that should have been conducted by states at the outset. As the emerging facts and history have led some courts to conclude, "[w]hatever the merits of the protocol in the abstract, there can be no real doubt that Defendants' implementation of [California's protocol] has major flaws." *Morales*, 465 F. Supp. 2d at 974.

Given how engrained the current lethal injection protocol has become—despite that protocol's shaky history—judicial oversight has been an integral part of this emerging reevaluation of lethal injection. Thoughtful examination will continue only if this Court reinforces the necessity of Eighth Amendment review of the factual reality of states' chosen lethal injection drugs, procedures, and administration. As the district court in Tennessee recently affirmed: "These [recent] cases demonstrate that, although lethal injection is the most prevalent form of execution, it is not sacrosanct, and . . . the constitutionality of a three-drug protocol is depend[e]nt on the merits of that protocol." *Harbison v. Little*, __ F. Supp. 2d __, No. Civ. 3:06-01206, 2007 WL 2821230, at * 30 (M.D. Tenn. Sept. 19, 2007).

Lethal injection's peculiar history also has caused a systemic failure of democratic reform. The factors described in this Part have shielded lethal injection from the kind of public scrutiny that has led states in the past to reform execution methods. *See supra* Part I. As a result of lethal injection's history and attendant secrecy, a needlessly flawed protocol has

become entrenched and the details of lethal injection implementation have escaped public scrutiny. Given this historical context, deference to state legislative determinations is unwarranted; courts must carefully review execution methods to ensure that they are free of severe and unnecessary pain. *See, e.g.*, *Morales v. Hickman*, 438 F.3d 926, 926 (9th Cir. 2006) (per curiam) (stating that *Gregg* proscribes procedures that create "a foreseeable and undue risk [of] . . . unnecessary and wanton pain"), *cert. denied*, 546 U.S. 1163 (2006); *Morales*, 465 F. Supp. 2d at 974 (applying "undue and unnecessary risk" standard).

Although the Supreme Court of Kentucky was aware of the historical development of the state's lethal injection protocol, it erred by failing to take that history into account in determining the standard by which the state's method must be scrutinized under the Eighth Amendment.

CONCLUSION

The decision of the Supreme Court of Kentucky should be reversed.

Respectfully submitted,

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AMICUS CURIAE BRIEF

No. 07-5439

In the Supreme Court of the United States

RALPH BAZE, ET AL.,

Petitioners,

v.

JOHN D. REES, ET AL.,

Respondents.

On Writ of Certiorari to the Supreme Court of Kentucky

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QUESTION PRESENTED

Amicus will address the following question:

Does Kentucky's three-drug lethal injection protocol, which is used in some form by every State employing lethal injection as a method of execution, violate the Eighth Amendment's prohibition against cruel and unusual punishment?

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415 F. Supp. 2d 1037 (N.D. Cal. 2006) 5

Morales v. *Hickman*,
438 F.3d 926 (9th Cir. 2006), cert. denied,
Morales v. *Hickman*, 546 U.S. 1163 (2006) 5

Morales v. *Tilton*,
465 F. Supp. 2d 972 (N.D. Cal. 2006) 5

Roper v. *Simmons*,
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Taylor v. *Crawford*,
445 F.3d 1095 (8th Cir. 2006) 5

Taylor v. *Crawford*,
487 F.3d 1072 (8th Cir. 2007) 5

TABLE OF AUTHORITIES—continued

Page(s)

Thompson v. *Oklahoma*,
487 U.S. 815 (1988) 4

Timberlake v. *Buss, (slip copy)*,
2007 WL. 1280664 (S.D. Ind. 2007) 5

Trop v. *Dulles*,
356 U.S. 86 (1958) 4

Walker v. *Johnson*,
448 F. Supp. 2d 719 (E.D. Va. 2006) 5

Wilkerson v. *Utah*,
99 U.S. 130 (1878) 5

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1465 U.N.T.S. 113 8

1144 U.N.T.S. 123 8

O.A.S.T.S. No. 67 8

TABLE OF AUTHORITIES—continued

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E.S.C. res. 1984/50, annex, 1984 U.N. ESCOR Supp. (No. 1), U.N. Doc. E/1984/84 (1984) 9

ICCPR Gen. Comment 20, U.N. Hum. Rts. Comm., 44th Sess., U.N. Doc. CCPR/C/21/Add.3 6

European Union General Affairs Council, Guidelines to EU Policy Towards Third Countries on Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment (Apr. 9, 2001) 9

Statement of Conrad Harper, Legal Advisor, United States Department of State, to the United Nations Human Rights Committee, U.N. GAOR Hum. Rts. Comm., 53d Sess., 1405th mtg., U.N. Doc. HR/CT/404 (1995) 7

Matthew Waxman, Head of U.S. Delegation, Opening Statement on the Report Concerning the International Covenant on Civil and Political Rights (July 17, 2006) 7

Legislative Research Committee, *Issues Confronting the 1998 General Assembly, Informational Bulletin No. 198*, at 99 (Sept. 1997) 11

TABLE OF AUTHORITIES—continued

Page(s)

So Long as They Die: Lethal Injections in the United States, Human Rights Watch (Human Rights Watch, New York, N.Y.) (April 2006) 1

BRIEF OF HUMAN RIGHTS WATCH AS *AMICUS CURIAE* IN SUPPORT OF PETITIONER

INTEREST OF THE *AMICUS CURIAE*

Human Rights Watch is a non-governmental organization established in 1978 to monitor and promote observance of internationally recognized human rights. It has Special Consultative Status at the United Nations, regularly reports on human rights conditions in the United States and more than seventy other countries around the world, and actively promotes legislation and policies worldwide that advance protections of domestic and international human rights and humanitarian law. *Amicus* has extensively researched lethal injections in the United States and published a report on the matter. *So Long as They Die: Lethal Injections in the United States*, Human Rights Watch (Human Rights Watch, New York, N.Y.) (April 2006).[1]

Because amicus has unique expertise in the intersection between these areas of law and the Eighth Amendment, it submits this brief to assist the Court in resolving this case.

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[1] Pursuant to Rule 37.6, amicus affirms that no counsel for a party authored this brief in whole or in part and that no person other than amicus and its counsel made a monetary contribution to its preparation or submission. Letters from the parties' counsel consenting to the filing of this brief have been filed with the Clerk.

INTRODUCTION AND SUMMARY OF ARGUMENT

Lethal injection has been touted as the most humane method of execution and, to a layman, the claim is appealing. The methodology mimics controlled medical procedures and even evokes the euphemistic "putting to sleep" characterization of animal euthanasia. The reality is considerably less predictable and, at times, the equivalent of torture.

State and federal courts across the country have faced a deluge of challenges to the three-drug protocol used by every State that approves lethal injection as a method of execution. Even before the Court approved § 1983 claims in *Hill* v. *McDonough*, 126 S. Ct. 1096 (2006), mounting evidence revealed serious flaws in the three-drug lethal injection protocol. Since prisoners have been able to bring § 1983 challenges, evidentiary records in those proceedings support the claims of opponents that the three-drug protocol is inherently flawed and likely to cause severe pain and suffering.

Although the evidence has been consistent, lower courts' decisions have been varied and unpredictable, primarily because they lack guidance on the appropriate legal standard to apply to Eighth Amendment method-of-execution claims. This Court has not directly addressed such a claim in over a century. Fortunately, international human rights law provides a clear and practicable standard—whether the method of execution utilized inflicts the minimum possible pain and suffering.

The international standard is unambiguous and consistent with, indeed supported by, this Court's Eighth Amendment jurisprudence. By contrast, the standard applied by the Supreme Court of Ken-

tucky—whether the method of execution bears a substantial risk of the wanton infliction of unnecessary pain—is unworkable. It fails to provide meaningful guidelines that comply with international human rights law and the Eighth Amendment.

The history of Kentucky's adoption of its current three-drug lethal injection protocol reveals a legislature acting with the intent to adopt a method of execution more humane than electrocution. Nevertheless, both the legislature and the Department of Corrections, the State entity charged with developing and implementing the lethal injection protocol, failed to conduct any research to ensure that the three-drug protocol was in fact less likely to cause pain and suffering than electrocution. Nor did the Kentucky Legislature and Department of Corrections consider substantial evidence that other States' experience with the three-drug protocol proved that the protocol was inherently flawed and likely to cause excruciating pain.

Kentucky must address this dearth of research and evaluate the three-drug protocol it utilizes in executions. If independent research reveals that its current protocol does not minimize pain and suffering, Kentucky must implement the alternative that satisfies that standard.

ARGUMENT

THE EIGHTH AMENDMENT'S CRUEL AND UNUSUAL PUNISHMENT STANDARD SHOULD BE INFORMED BY INTERNATIONAL LAW NORMS REGARDING PERMISSIBLE METHODS OF EXECUTION.

For at least half a century, this Court's Eighth Amendment jurisprudence has looked to interna-

tional standards and practices in giving meaning to the prohibition against cruel and unusual punishment. *Trop* v. *Dulles*, 356 U.S. 86 (1958), acknowledged the guidance derived from the "civilized nations of the world" in interpreting the Eighth Amendment; the Court looked to "the evolving standards of decency that mark the progress of a maturing society." *Id.* at 102, 101. The Court also stated that the "[Eighth] Amendment stands to assure that this power be exercised within the limits of civilized standards." *Id.* at 100. Like international human rights law, the underpinning of the Eighth Amendment is "nothing less than the dignity of man." *Ibid.*

Since deciding *Trop*, the Court has consistently looked "to international authorities as instructive for its interpretation of the Eighth Amendment's prohibition of cruel and unusual punishment." *Roper* v. *Simmons*, 543 U.S. 551, 575 (2005) (internal quotation marks omitted). See also *Thompson* v. *Oklahoma*, 487 U.S. 815, 830 n.31 (1988) (overruled on other grounds); *Enmund* v. *Florida*, 458 U.S. 782, 796, n.22 (1982). Justice Kennedy's opinion for the Court in *Roper* elucidated the delicate balance this Court strikes between our own laws and the laws we share with the international community:

> It does not lessen our fidelity to the Constitution or our pride in its origins to acknowledge that the express affirmation of certain fundamental rights by other nations and peoples simply underscores the centrality of those same rights within our own heritage of freedom.

Roper, 543 U.S. at 578.

The Court has not addressed an Eighth Amendment challenge to a particular method for administering the death penalty for nearly 130 years. See *Wilkerson* v. *Utah*, 99 U.S. 130 (1878) (upholding execution by a firing squad). The lower courts addressing the issue therefore have based their decisions on different aspects of Eighth Amendment jurisprudence, with no specific link to the concerns peculiar to execution methods. As a result, the lower courts have reached dissimilar conclusions in factually similar cases. See, *e.g.*, *Taylor* v. *Crawford*, 487 F.3d 1072 (8th Cir. 2007); *Hamilton* v. *Jones*, 472 F.3d 814 (10th Cir.), cert. denied, 127 S. Ct. 1054 (2007); *Morales* v. *Hickman*, 438 F.3d 926 (9th Cir.), cert. denied, 546 U.S. 1163 (2006); *Taylor* v. *Crawford*, 445 F.3d 1095 (8th Cir. 2006); *Timberlake* v. *Buss*, 2007 WL 1280664 (S.D. Ind. May 1, 2007); *Evans* v. *Saar*, 412 F. Supp. 2d 519 (D. Md. 2006); *Morales* v. *Hickman*, 415 F. Supp. 2d 1037 (N.D. Cal. 2006); *Morales* v. *Tilton*, 465 F. Supp. 2d 972 (N.D. Cal. 2006); *Walker* v. *Johnson*, 448 F. Supp. 2d 719 (E.D. Va. 2006); *Beardslee* v. *Woodford*, 395 F.3d 1064 (9th Cir. 2005); *Bieghler* v. *State*, 839 N.E.2d 691 (Ind. 2005), cert. denied, *Bieghler* v. *Indiana*, 546 U.S. 1159 (2006); *Abdur'Rahman* v. *Bredesen*, 181 S.W.3d 292 (Tenn. 2005), cert. denied, 126 S. Ct. 2288 (2006).

International human rights law, by contrast, directly addresses the standard that a particular method of execution must satisfy in order to be permissible under standards analogous to the Eighth Amendment. Moreover, unlike the standard applied below, the international law rule is clear, practical and unambiguous. This Court's adoption of the in-

ternational standard will result in consistent decisions by the lower courts.

A. International Law Requires That Any Execution Pursuant To A Lawfully-Imposed Death Penalty Be Accomplished With The Minimum Possible Pain And Suffering.

Several sources of international law support the conclusion that executions are permissible only when they inflict the minimum possible suffering.[2] Thus, Article 7 of the International Covenant on Civil and Political Rights, provides that "[n]o one shall be subjected to torture or to cruel, inhuman o degrading treatment or punishment." International Covenant on Civil and Political Rights, Dec. 16, 1966, art. 7, 999 U.N.T.S. 171 [hereinafter "Covenant"].

The United Nations Human Rights Committee ("HRC"), the international body charged with monitoring compliance with the Covenant, has interpreted Article 7 in the context of government executions. Its formal guidance states that "when the death penalty is applied by a State party for the most serious crimes, * * * it must be carried out in such a way as to cause the least possible physical and mental suffering." ICCPR Gen. Comment 20, U.N. Hum. Rts. Comm., 44th Sess., at p. 6, U.N. Doc. CCPR/C/21/Add.3 (Oct. 3, 1992).

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[2] The treaties and resolutions cited herein, and the body of international human rights law that has developed around them, do not prohibit the death penalty per se. Rather, they seek to preserve the "inherent dignity of the human person." Preamble to the International Covenant on Civil and Political Rights.

Applying that standard to the case of Charles Chitat Ng, an individual who faced execution by lethal gas after extradition from Canada to the United States, the HRC determined that the proposed method of execution was "particularly abhorrent" and "contrary to internationally accepted standards of human treatment." *Chitat Ng* v. *Canada*, Communication No. 469/1991, U.N. Doc. CCPR/C/49/D/469/1991 (Jan. 7, 1994) (Hum. Rts. Comm.) ¶ 16.1. The HRC noted that, while article 6, paragraph 2 of the Covenant allows for the death penalty under limited circumstances, the "method of execution provided for by law must be designed in such a way as to avoid conflict with article 7." *Id.* Because the manner by which the execution was to take place "would not meet the test of 'least possible physical and mental suffering'" it violated the standards of the Covenant and constituted cruel and inhuman treatment. *Id.* ¶ 16.4.[3]

Also relevant are the terms of the Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, ratified by the United States in 1994. It states in pertinent part:

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[3] Significantly, the United States has recognized that "[m]any of the most cherished rights protected by the U.S. Constitution, such as * * * the prohibition on cruel and unusual punishments, also find expression and protection in the Covenant." Matthew Waxman, Head of U.S. Delegation, Opening Statement on the Report Concerning the International Covenant on Civil and Political Rights (July 17, 2006), *available at* http://www.state.gov/g/drl/rls/70392.htm. Also, that "courts could refer to the Covenant and take guidance from it." Statement of Conrad Harper, Legal Advisor, United States Department of State, to the United Nations Human Rights Committee, U.N. GAOR Hum. Rts. Comm., 53d Sess., 1405th mtg., U.N. Doc. HR/CT/404 (1995).

> Each State Party shall undertake to prevent in any territory under its jurisdiction other acts of cruel, inhuman or degrading treatment or punishment which do not amount to torture as defined in article 1, when such acts are committed by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity.

Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, Dec. 10, 1984, art. 16(1), 1465 U.N.T.S. 113 [hereinafter "Convention Against Torture"]. Implementing the death penalty may violate the Convention Against Torture—as an act of "cruel, inhuman or degrading treatment or punishment"—not only when the method of execution runs counter to the standards of the Convention, but also when the circumstances of a particular execution fail to comply with the Convention's standards.[4]

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[4] A similar prohibition is contained in the American Convention on Human Rights, signed by the United States in 1977 and entered into force by the Organization of American States in 1978, which states that no person shall be subjected to "cruel, inhuman or degrading punishment or treatment." American Convention on Human Rights, Nov. 22, 1969, art. 5(2), O.A.S.T.S. No. 36, 1144 U.N.T.S. 123. The Organization of American States in 1985 adopted its Inter-American Convention to Prevent and Punish Torture, reaffirming the determination that "cruel, inhuman, or degrading treatment or punishment constitute[s] an offense against human dignity." Inter-American Convention to Prevent and Punish Torture, Dec. 9, 1985, Preamble, O.A.S.T.S. No. 67.

Non-treaty sources of international law also address limitations on the manner of execution. The Safeguards Guaranteeing Protection of the Rights of Those Facing the Death Penalty, adopted by the UN Economic and Social Council, requires that "[w]here capital punishment occurs, it shall be carried out so as to inflict the minimum possible suffering." E.S.C. res. 1984/50, annex, 1984 U.N. ESCOR Supp. (No. 1) at 33, U.N. Doc. E/1984/84 (1984). The European Union, in 2001, also adopted principles which urge third countries that practice the death penalty to ensure that the method of execution causes the "least possible physical and mental suffering." European Union General Affairs Council, Guidelines to EU Policy Towards Third Countries on Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment (Apr. 9, 2001).

The overwhelming weight of international authority thus requires that the death penalty be administered in a manner that preserves the principles of human dignity. That standard obligates a state actor implementing a death sentence to make every effort to minimize possible pain and suffering by the individual to be executed, even if that means that the state must reject a particular method in favor of an alternative that causes less suffering.

Because "the opinion of the world community * * * provide[s] respected and significant confirmation for [the Court's] own conclusions," *Roper*, 543 U.S. at 578, the Court should hold that a lethal injection protocol is permissible under the Eighth Amendment only if it inflicts the minimum possible pain and suffering. That standard fits naturally with the Eighth Amendment's prohibition of cruel and unusual punishment: the Court specifically admon-

ished in *In re Kemmler*, 136 U.S. 436, 447 (1890), that capital punishment is cruel when it "involve[s] torture or a lingering death * * * something more than the *mere extinguishment of life*" (emphasis added).

The standard adopted by the court below—whether the method of execution creates "a substantial risk of wanton or unnecessary infliction of pain," *Baze* v. *Rees*, 217 S.W.3d 207, 211 (Ky. 2006)—does not comport with this settled international law norm. To begin with, the lower court's standard is vague, because the "substantial risk" element provides insufficient guidance to those tasked with designing an execution protocol. Before a State can determine what makes the risk of pain and suffering "substantial" enough to be unconstitutional, it must determine the standard against which the risk is measured.

Moreover, unlike the international law norm, a "substantial risk" test permits a State to disregard available low-risk execution protocols as long as the protocol it adopts does not pose a "substantial risk." That necessarily permits States to utilize an execution procedure that inflicts more pain and suffering than an alternative method. International human rights law conversely and sensibly demands that the method causing the least pain and suffering always be employed.

That test is clear and administrable and complies with the Eighth Amendment. The Kentucky Supreme Court's vague, cumbersome standard does neither.

B. Kentucky Adopted The Three-Drug Lethal Injection Protocol Notwithstanding The Protocol's Demonstrated Failure To Minimize Pain And Suffering.

Kentucky replaced electrocution with lethal injection in 1998. See Ky. Rev. Stat. Ann. § 431.220(1)(a) (1998). At that time, legislators disregarded a report from Kentucky's own Legislative Research Commission warning of claims by doctors that prisoners could "strangle or suffer excruciating pain" during the chemical injections but may be "prevented by the paralytic agent from communicating their distress." Legislative Research Committee, *Issues Confronting the 1998 General Assembly, Informational Bulletin No. 198*, at 99 (Sept. 1997), *available at* www.lrc.ky.gov/lrcpubs/Ib198.pdf (internal citation omitted). The same report also pointed to evidence of numerous botched executions in other States that used substantially the same lethal injection protocol. *Ibid.*

Moreover, the statute that Kentucky adopted failed to comply with the governing Eighth Amendment principles. It provides that "every death sentence shall be executed by continuous intravenous injection of a substance or combination of substances sufficient to cause death." Ky. Rev. Stat. Ann. § 431.220(1)(a) (1998). Precisely which substances to use and how to inject them were questions consigned to the discretion of the Kentucky Department of Corrections. That Department simply adopted the procedures used in other States; it "did not conduct any independent scientific or medical studies or consult any medical professionals concerning the drugs and dosage amounts to be injected into the condemned." *Baze* v. *Rees*, No. 04-Cl-1094, 2005 WL 5797977, at

*6-7 (Ky. Cir. Ct. Jul. 8, 2005). That is plainly insufficient to conform to the requirements of the Eighth Amendment.

Certainly the description of the execution carried out by Kentucky provides no assurance that Kentucky's only lethal injection execution was not constitutionally flawed. "Harper went to sleep within 15 seconds to one minute from the moment that the warden began the execution and never moved or exhibited any pain whatsoever subsequent to losing consciousness." *Baze*, 217 S.W.3d at 212. There can be no guarantee Harper actually did lose consciousness. After the warden administered the pancuronium bromide, a conscious Harper would have suffocated to death in silent paralysis, unable to express his agony when the potassium chloride burned his veins on its way to his heart.

Moreover, it is disingenuous for the State to claim that the protocol is humane on the basis of one execution when executions around the country have gone tragically awry. The protocol was flawed at its conception, and its continued use despite clear evidence that alternatives would minimize pain and suffering violates the Eighth Amendment.

CONCLUSION

The judgment of the Supreme Court of Kentucky should be reversed.

Respectfully submitted.

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NOVEMBER 2007

AMICUS CURIAE BRIEF

No. 07-5439

IN THE

Supreme Court of the United States

RALPH BAZE, ET AL.,
Petitioners,

v.

JOHN D. REES, ET AL.,
Respondents.

ON WRIT OF CERTIORARI TO THE
SUPREME COURT OF KENTUCKY

BRIEF FOR *AMICI CURIAE* MICHAEL MORALES, MICHAEL TAYLOR, VERNON EVANS, JR., AND JOHN GARY HARDWICK, JR., IN SUPPORT OF PETITIONERS

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Conner v. N.C. Council of State, No. 07-GOV-0238, 07-GOV-0264 (N.C. O.A.H. Aug. 9, 2007).....24

Harbison v. Little, No. 3:06-1206, 2007 WL 2821230 (M.D. Tenn. Sept. 19, 2007).....passim

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Lightbourne v. McCollum, No. SC06-2391, 2007 WL 3196533 (Fla. Nov. 1, 2007) 32, 33

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Nelson v. Campbell, 541 U.S. 637 (2004) 2

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Taylor v. Crawford, No. 05-4173-CV-C-FJG, 2006 WL 1779035, (W.D. Mo. June 26, 2006) 25, 28

COURT DOCUMENTS

Aff. of Catherine Burton, *Patton v. Jones*, No. 06-591 (W.D. Okla. Feb. 19, 2004).....34

Aff. of Marvin L. Polk, *Page v. Beck*, No. 5:04-CT-04-BO (E.D.N.C. Jan. 6, 2004) 19

Am. Joint Pre-Hr'g Conf. Statement, *Morales v. Tilton*, No. C06-0219, C06-926 (N.D. Cal. Nov. 27, 2006).....passim

TABLE OF AUTHORITIES—Continued

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Decl. of Dr. Mark J.S. Heath, *Morales v. Hickman*, No. C06-0219, C06-926 (N.D. Cal. Jan. 12, 2006) 31
Decl. of Dr. Mark J.S. Heath, *Patton v. Jones*, No. 06-591 (W.D. Okla. July 27, 2006) 19
Decl. of Dr. Mark J.S. Heath, *Roane v. Gonzales*, No. 05-2337 (D.D.C. Sept. 7, 2007) (redacted version, publicly filed) 19, 20
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Decl. of Patrick J. Ehlers, *Patton v. Jones*, No. 06-591 (W.D. Okla. Mar. 1, 2004) 34
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Dep. Tr. of Protected Person 8, *Roane v. Gonzales*, No. 05-2337 (D.D.C. July 25, 2007) 9
Dep. Tr. vol. I, *Jackson v. Danberg*, No. 06-CV-300 (D. Del. Sept. 10, 2007) (testimony of Dr. Mark Dershwitz) 21

TABLE OF AUTHORITIES—Continued

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Ex. 4R, *Addendum to Bureau of Prisons Execution Protocol Federal Death Sentence Implementation Procedures* (effective July 1, 2007), Decl. of Dr. Mark J.S. Heath, *Roane v. Gonzales*, No. 05-2337 (D.D.C. Sept 7, 2007) (redacted version, publicly filed) 19

Ex. 4S, *Protocol Lead Script*, Decl. of Dr. Mark J.S. Heath, *Roane v. Gonzales*, No.05-2337 (D.D.C. Sept. 7, 2007) (redacted version, publicly filed) 24

Hr'g Tr., *Conner v. N.C. Council of State*, No. 07-GOV-0238, 07-GOV-0264 (N.C. O.A.H. May 21, 2007) (testimony of Dr. Obi Umesi) 25

Pet'r's Brief, *Baze v. Rees*, No. 07-5439 (U.S. Nov. 5, 2007).....7

Pls.' and Intervenor Pls.' Opp'n to Def.'s Mot. and Corrected Mot. for J. on the Pleadings and Mot. to Lift the Stay of the Pls.' Executions, *Roane v. Gonzales*, No. 05-2337 (D.D.C. Oct. 10, 2007) (redacted version, publicly filed).....16

Post-Trial Decl. of Dr. Mark J.S. Heath, *Morales v. Tilton*, No. C06-0219, C06-926 (N.D. Cal. Nov. 9, 2006).....23

Prelim. Inj. Tr., *Patton v. Jones*, No. 06-591 (W.D. Okla. Aug. 8, 2006).....34

Taylor v. Crawford, No. 2:05-CV-04173-FJG (W.D. Mo. Sept. 12, 2006) (Order).....15

Tr. of Test. of John Doe No.1, *Taylor v. Crawford*, No. 05-4173 (W.D. Mo. June 5, 2006).....13, 14, 15, 21

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Page(s)

Trial Tr., *Evans v. Saar*, No. 06-149 (D. Md. Sept. 20, 2006) (testimony of Contractual Team A) 10, 12

Trial Tr., *Evans v. Saar*, No. 06-149 (D. Md. Oct. 10, 2006) (testimony of Contractual Team B) 10

Trial Tr., *Evans v. Saar*, No. 06-149 (D. Md. Oct. 11, 2006) (testimony of Dr. Mark Dershwitz) 6, 22

Trial Tr., *Taylor v. Crawford*, No. 05-4173 (W.D. Mo. June 13, 2006) (testimony of Larry Crawford, Director, Mo. Dept. of Corrections) 15

Trial Tr., *Timberlake v. Buss*, No. 06-1859 (S.D. Ind. Apr. 26, 2007) (testimony of Warden Ed Buss) 26

OTHER AUTHORITIES

Autopsy Report for Joseph Clark, Dr. L.J. Dragovic, Office of the Medical Examiner, Oakland County, Michigan (Aug. 15, 2006) 34

Autopsy Report for Lloyd LaFevers, Dr. Larry Balding, Office of the Chief Medical Examiner, Oklahoma City, Oklahoma (Jan. 31, 2001) 34

Burke, Sheila, *Tennessee Will Lift Ban on Executions*, Tennessean, May 1, 2007 18

Clinesmith, Sonja, *Moans Pierced Silence During Wait*, Arkansas Democrat Gazette, Jan. 26, 1992. 29

TABLE OF AUTHORITIES—Continued

Page(s)

Diel, Stan, *State's New Execution Procedure Detailed*, Birmingham News, Oct. 26, 2007 26

Farber, Neil, et al., *Physicians' Willingness to Participate in the Process of Lethal Injection for Capital Punishment*, 135 Annals of Internal Med. 884 (2001) 7

Gawande, Atul, *When Law and Ethics Collide – Why Physicians Participate in Executions*, 354 New Eng. J. of Med. 1221 (2006) 7

Governor's Commission on Administration of Lethal Injection, Final Report with Findings and Recommendations (Mar. 1, 2007) 11, 12, 33

Hr'g Tr. vol. IV, Governor's Commission on Administration of Lethal Injection (Feb. 9, 2007) 11

Hr'g Tr. vol. IV, Governor's Commission on Administration of Lethal Injection (Feb. 12, 2007) (testimony of Dr. William Frank Hamilton) 32, 33

Hr'g Tr. vol IV, Governor's Commission on Administration of Lethal Injection (Feb. 19, 2007) (testimony of George B. Sapp) 12, 32

Kohler, Jeremy, *Behind the Mask of the Execution Doctor*, St. Louis Post-Dispatch, July 30, 2006 ..... 13, 14, 15

Letter from Michael Pritchett, Assistant Attorney General of Missouri, to Michael Gans, Clerk, U.S. Court of Appeals, 8th Cir. (Apr. 17, 2007) 15

TABLE OF AUTHORITIES—Continued

Page(s)

Liptak, Adam, *After Problem Execution, Governor Bush Suspends the Death Penalty in Florida*, N.Y. Times, Dec. 16, 2006 29
Liptak, Adam, *Trouble Finding Inmate's Vein Slows Lethal Injection in Ohio*, N.Y. Times, May 3, 2006 .....33, 34
Mangels, John, *Condemned Killer Complains Lethal Injection "Isn't Working,"* Cleveland Plain Dealer, May 3, 2006 29
Martin, Mark, *Lawmakers Rip Governor Over Death Chamber*, S. F. Chron., May 9, 2007 27
State of Tennessee, Manual of Execution: Lethal Injection, (Oct. 1, 2006) 18, 19
Tisch, Chris, *Governor Bush Halts Executions*, St. Petersburg Times, Dec. 16, 2006 32
Waisel, David, *Physician Participation in Capital Punishment*, 82 Mayo Clinic Proceedings 1073 (2007) 7
Weil, Elizabeth, *The Needle and the Damage Done*, N.Y. Times Magazine, Feb. 11, 2007 5

INTEREST OF *AMICI CURIAE*[1]

Amici Michael Morales, Michael Taylor, Vernon Evans, Jr., and John Gary Hardwick, Jr., are inmates sentenced to death by the States of California, Missouri, Maryland, and Florida, respectively. *Amicus* Taylor has a petition for certiorari pending before this Court that raises the question of the proper Eighth Amendment legal standard for lethal injection challenges.

Together, *amici* comprise a representative group of death row inmates who have filed civil rights actions challenging the means and manner by which they are likely to be executed. Through discovery, *amici* have uncovered evidence of serious flaws in the lethal injection procedures in their respective jurisdictions. Because prison officials have traditionally shrouded the details of the administration of their execution procedures in secrecy, much of this information has not previously been available to the public. In addition, because many jurisdictions employ similar lethal injection protocols, *amici* have looked to jurisdictions around the country for information relevant to their respective challenges, and are aware of the evidence discovered in those jurisdic-

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[1] No counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than counsel for *amici* made a monetary contribution to its preparation or submission. This brief was written with the assistance of Joy Haviland and Vanessa Ho, students in the Death Penalty Clinic at the University of California, Berkeley School of Law. The parties have consented to the filing of this brief.

tions. By virtue of their litigation, *amici* and their counsel can provide a needed perspective, one that would not otherwise be known to the Court, regarding lethal injection protocols and the various means by which departments of correction implement those protocols.

SUMMARY OF ARGUMENT

Execution by lethal injection can be performed constitutionally. The three-drug formula employed in almost all jurisdictions can result in humane executions, but only if administered properly, with the precision and care the use of such drugs requires. Because the drugs used are so volatile, and will inflict excruciating pain and suffering on inadequately anesthetized inmates, the question is whether jurisdictions that employ lethal injection have put in place reasonable procedures to effectuate a humane execution and to deal with the foreseeable problems with this method of execution. This brief argues that many of them have not done so. Instead, they have turned a blind eye to these foreseeable problems, allowing ignorance and neglect – rather than science and deliberation – to guide the formation and implementation of lethal injection protocols. The result has been botched executions that are entirely predictable and preventable.

To fully appreciate the reality of how lethal injection has been administered, one must look at the entire landscape of lethal injection challenges and, in particular, the information revealed in discovery following the Court's rulings in *Nelson v. Campbell*, 541 U.S. 637 (2004) and *Hill v. McDonough*, 126 S. Ct.

2096 (2006). Unfortunately, compelling examples of incompetent administration are currently under protective order. Nevertheless, information that *is* public reveals a "pervasive lack of professionalism," *Morales v. Tilton*, 465 F. Supp. 2d 972, 980 (N.D. Cal. 2006), in the development and administration of lethal injection protocols in this country. This lack of professionalism makes it inevitable that some inmates will suffer torturous deaths.

As this Court contemplates the appropriate Eighth Amendment standard to adjudicate lethal injection challenges, it should be aware of the flawed practices documented in the records of litigation across the country. The legal standard this Court sets should take account of the multitude of problems these records reveal, and it should allow lower courts to continue what they have already been doing: adjudicating the facts of each case to determine whether the risks that the inmate will experience pain or conscious suffering are sufficient to violate the Eighth Amendment. The vast majority of these courts have applied the "unnecessary risk" standard the Petitioners urge in this case. That framework has enabled courts to evaluate the often appalling evidence revealed in discovery and to differentiate between risks that are the foreseeable result of deficient procedures, and risks that are unavoidable even in carefully constructed procedures, or too remote to be constitutionally significant.

The secrecy surrounding executions, the failure to record relevant data, and the protective orders in place in many jurisdictions make it impossible to exhaustively or reliably catalogue the problems that

have occurred during lethal injections. Additionally, because each jurisdiction has chosen to paralyze inmates before injecting them with potassium chloride, the risk – and reality – of conscious pain or suffering is often not readily apparent. Yet publicly available evidence does demonstrate that executions are often conducted in a haphazard manner by unfit personnel, and that numerous failures have led to substantial uncertainty regarding whether the drugs in many executions were properly administered. Each step of the procedure can go awry, with disastrous (but often unseen) consequences, when prison officials disregard or ignore the inherent risks of the three-drug formula. In short, this brief describes what is known to have gone awry, and why.[2]

ARGUMENT

I. JURISDICTIONS THAT EMPLOY LETHAL INJECTION HAVE CHOSEN A METHOD WITH VERY LITTLE TOLERANCE FOR ERROR.

As the Court is aware, people are executed in this country by the intravenous injection of a three-drug formula involving the serial administration of thiopental,[3] pancuronium bromide, and potassium

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[2] All documents cited in this brief are available from counsel for *amici* upon request from this Court. Virtually all of these documents are also available on the website www.lethalinjection.org, where an annotated, linked version of this brief is posted.

[3] Thiopental is also known as Sodium Pentothal, Sodium Thiopental, or Thiopentone. It will be referred to throughout this brief as thiopental.

chloride. Death in an execution by lethal injection is, in almost all cases, caused by the administration of the potassium chloride. In other words, the inmate is alive throughout the process of execution until the last drug is administered.

"It is undisputed that, without proper anesthesia, the administration of pancuronium bromide and potassium chloride, either separately or in combination, would result in a terrifying, excruciating death." *Harbison v. Little*, No. 3:06-1206, 2007 WL 2821230, at *11 (M.D. Tenn. Sept. 19, 2007). Thus, it is incumbent upon jurisdictions that have chosen to use this method of execution to ensure that sufficient anesthetic depth is achieved and maintained throughout the execution.

Achieving sufficient anesthetic depth – so that the inmate does not experience the pain of a torturous death – is no simple matter.[4] To begin with, thiopental is packaged in kits, not as a pre-mixed solution. The execution team must mix the powdered drug with water immediately prior to injection. Additionally, correctional staff usually must combine several thiopental kits into syringes, in amounts and concentrations with which few if any execution team members have training or expertise. Indeed, preparation of controlled substances, particularly for intravenous use, is a technical task requiring significant training. In order to successfully administer the anesthetic, execution team members must correctly

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[4] *See generally Morales v. Tilton*, 465 F. Supp. 2d 972 (N.D. Cal. Nov. 27, 2006); Elizabeth Weil, *The Needle and the Damage Done*, N.Y. Times Magazine, Feb. 11, 2007, at 46.

insert an intravenous catheter into the inmate's veins and then connect and disconnect numerous syringes to the IV port in the correct sequence. If a catheter is improperly placed in an inmate's peripheral vein, or the vein is compromised by repeated punctures from inexperienced or sloppy IV placement, the drugs will enter the surrounding tissue, but will not be delivered to the central nervous system. If team members are unable to maintain access in the peripheral veins, a delicate and complicated procedure may be needed by which an intravenous catheter is placed into a central vein. This procedure "typically requires a greater level of expertise . . . than somebody from the IV team would generally have," and usually must be performed by a physician.[5] These tasks are complicated by the fact that they are divided among multiple people and are not part of the execution team members' day-to-day job responsibilities, so execution personnel can bring little training or expertise to bear.

These complex procedures, employing the dangerous three-drug formula, require the participation of adequately trained and qualified personnel for effective administration. It would not impede executions to recognize the need for qualified personnel to administer the three-drug formula, and to require states to use them where appropriate. It is important to note that there is no shortage of doctors, including anesthesiologists, and other medical professionals who express a willingness to participate in

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[5] Trial Tr. at 139, *Evans v. Saar*, No. 06-149 (D. Md. Oct. 11, 2006) (testimony of Dr. Mark Dershwitz).

lethal injection executions.[6] Nevertheless, as discussed below, lethal injection jurisdictions have continued to rely upon prison employees who are neither trained nor capable of performing the complicated tasks the three-drug formula requires.

The risk here is not of an accident or chance occurrence. Unforeseeable accidents will occur with any execution protocol, and that fact does not render all execution methods unconstitutional. The botched lethal injections that have occurred in this country, and which Petitioner's brief discusses,[7] can be traced directly to poorly-drafted protocols, insistence on remote administration with a highly complex sedative, deficient (or nonexistent) training of execution team members, incompetent oversight, and inadequate facilities. Unless states and the Federal Government are compelled to establish reasonable protections

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[6] *See, e.g.*, David Waisel, *Physician Participation in Capital Punishment*, 82 Mayo Clinic Proceedings 1073, 1078 (2007) (discussing risks inherent in the three-drug formula and arguing, from the perspective of a physician, that doctors should participate in executions); Atul Gawande, *When Law and Ethics Collide — Why Physicians Participate in Executions*, 354 New Eng. J. of Med. 1221, 1229 (2006) (reporting reasons why doctors participate in executions and describing interviews with four doctors and one nurse who have participated in at least 45 executions); Neil Farber et al., *Physicians' Willingness to Participate in the Process of Lethal Injection for Capital Punishment*, 135 Annals of Internal Med. 884, 884-890 (2001) (reporting that 41% of doctors surveyed would participate in executions and concluding that "[d]espite medical society policies, many physicians would be willing to be involved in the execution of adults").

[7] Pet'r's Brief at 20-24, *Baze v. Rees*, No. 07-5439 (U.S. Nov. 5, 2007).

against the foreseeable dangers posed by the three-drug formula, executions that result in the conscious pain or suffering of the inmate will continue to occur.

II. A Review of Public, Undisputed Facts from Multiple Jurisdictions Reveals a "Pervasive Lack of Professionalism" in the Development of Protocols and the Selection, Training, and Oversight of Execution Team Members.

Despite the complexity and high risk nature of the three-drug formula that jurisdictions have chosen, it is possible to administer the formula in a manner that all but guarantees the adequate anesthetization of the inmate. Unfortunately, the selection, training and oversight of execution team members in many jurisdictions has fallen woefully short of the standard necessary to ensure that the inherent risks in the three-drug protocol remain theoretical. The federal judge presiding over *amicus* Morales' challenge to the administration of California's protocol referred to the development and oversight of the lethal injection process in that state as the product of a "pervasive lack of professionalism." *Morales*, 465 F. Supp. 2d at 980. The extensive lack of professionalism is evident in many jurisdictions, and raises serious doubts as to whether the three-drug formula is working as it should.

A. Untrained and Unqualified Executioners

Even the most detailed, professional protocol for administering the three-drug formula is worthless if it is not read by the prison officials who conduct the executions. Yet records from several jurisdictions reveal that execution team members are routinely ignorant of the procedures that purport to govern the execution process. For example, in Tennessee, prison officials do not require team members to read the newly developed protocol unless they joined the team after the new protocol had been created. *Harbison*, 2007 WL 2821230, at *15. Several members of the federal execution team have not read any versions of the Bureau of Prison's execution protocol.[8] In California, testimony in the *Morales* litigation revealed that most execution team members had never read the protocol. When one was asked in a deposition whether she had done so, she responded, "I don't know what you're talking about."[9] In Maryland, neither the execution team leader, nor the team mem-

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[8] *See, e.g.*, Dep. Tr. of Protected Person 5 at 52, *Roane v. Gonzales*, No. 05-2337 (D.D.C. July 25, 2007); Dep. Tr. of Protected Person 6 at 127-28, *Roane v. Gonzales*, No. 05-2337 (D.D.C. July 24, 2007); Dep. Tr. of Protected Person 8 at 27, *Roane v. Gonzales*, No. 05-2337 (D.D.C. July 25, 2007).

[9] Am. Joint Pre-Hr'g Conf. Statement at 55, *Morales v. Tilton*, No. C06-0219, C06-926 (N.D. Cal. Nov. 27, 2006) [hereinafter "*Morales* Undisputed Facts"]. A Licensed Vocational Nurse who has set catheters in seven of the last nine California executions testified that he had never read the protocol. *Id.* at 19. Witness # 9, a team leader, also never read the protocol. *Id.* at 44.

ber responsible for establishing IV access, had ever seen a copy of the execution operations manual.[10]

1. Lack of training

In theory, rigorous training could compensate for ignorance of the written protocols. Perhaps not surprisingly, however, many of the jurisdictions in which team members are unfamiliar with the protocols also have little to no record of training with respect to implementation of the three-drug formula. Two states with recent histories of problematic, or botched executions – California and Florida – are illustrative of the consequences of inadequate training.

In California, a member of the execution team, who had participated in eight executions and was responsible for mixing and preparing the thiopental for executions, testified that "[w]e don't have training, really."[11] The team did not practice mixing the anesthetic, nor did they practice responses to foreseeable contingencies that could easily arise during executions.[12] There are no procedures in place to address the likely event that an IV will malfunction, because, as one witness testified, "those are the what-ifs that can go a thousand long."[13] One witness testified that

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[10] Trial Tr. at 113-14, *Evans v. Saar*, No. 06-149 (D. Md. Oct. 10, 2006) (testimony of Contractual Team B); Trial Tr. at 119, *Evans v. Saar*, No. 06-149 (D. Md. Sept. 20, 2006) (testimony of Contractual Team A).

[11] *Morales* Undisputed Facts at 13.

[12] *Id.* at 12-14.

[13] *Id.* at 67.

they draw the syringes with "[j]ust whatever volume we pretend to play with."[14] Another witness testified that "[t]here isn't really much training" regarding the administration of lethal drugs and it is "more a self-taught event."[15]

Following the botched execution of Angel Diaz in Florida last year, then-Governor Jeb Bush declared a moratorium on executions and appointed an executive commission to review Florida's lethal injection protocols. The Governor's Commission on Lethal Injection found a "failure of the training of the execution team members."[16] For example, the primary executioner during the Diaz execution, who had also served as the primary executioner for previous executions and had no medical training or qualifications,[17] testified that he does not participate in practice sessions or trainings prior to executions.[18] It is unsurprising, therefore, that team members were slow to realize that they had improperly inserted both of Diaz's IV catheters, and they did not know how to respond properly once they recognized the

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[14] *Id.* at 53.

[15] *Id.* at 41.

[16] Governor's Commission on Administration of Lethal Injection, Final Report with Findings and Recommendations, at 8 (Mar. 1, 2007).

[17] Hr'g Tr. vol. IV at 78, Governor's Commission on Administration of Lethal Injection (Feb. 9, 2007) (testimony of Primary Executioner).

[18] *Id.* at 80.

problem.[19] In fact, they reacted in the worst possible manner, injecting more pancuronium and potassium even though it was evident that Diaz may not have received a sufficient dose of thiopental to adequately anesthetize him.[20]

Without any training or qualifications of their own, and without comprehensive protocols to guide them, execution team members are left to fend for themselves, improvising as they go, and exponentially increasing the likelihood that the inmate will experience excruciating pain or suffering. This is particularly troubling since the execution team members "almost uniformly have no knowledge of the nature or properties of the drugs that are used or the risks or potential problems associated with the procedure." *Morales*, 465 F. Supp. 2d at 979. The executioners are "largely ignorant" and "completely unprepared" for the "known risks" of the three-drug formula. *Harbison*, 2007 WL 2821230, at *17-18.[21]

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[19] Governor's Commission on Administration of Lethal Injection, Final Report with Findings and Recommendations, at 8 (Mar. 1, 2007).

[20] *See, e.g.*, Hr'g Tr. vol. IV at 46-47, Governor's Commission on Administration of Lethal Injection (Feb. 19, 2007) (testimony of George B. Sapp).

[21] During federal court testimony in Maryland, the execution team member responsible for injecting the drugs could not identify any of the three drugs used in the protocol. Trial Tr. at 120-121, *Evans v. Saar*, No. 06-149 (D. Md. Sept. 20, 2006) (testimony of Contractual Team A). He also had no understanding of the purpose of each drug. *Id.* at 121. He was not aware that the second drug paralyzes the inmate; instead, he testified that it was his understanding that the second drug functions to "numb the body." *Id.*

2. Lack of screening

The pervasive lack of training is compounded by the fact that many jurisdictions place individuals on the execution team without screening them for any necessary qualifications, such as whether they have the requisite skills and expertise, are reliable, and can be trusted to handle dangerous, and addictive, controlled substances. As a result, many current and former execution team members are particularly ill-suited to carry out the complicated three-drug procedure.

The most well-known example of a jurisdiction entrusting its execution administration to an incompetent individual is the infamous "Dr. Doe" in Missouri. Dr. Doe is a surgeon to whom the Missouri Department of Corrections delegated the overhaul of their entire lethal injection procedures.[22] Dr. Doe was responsible not only for designing Missouri's execution procedures, but also for mixing the drugs and overseeing the executions themselves.[23] Litigation in *amicus* Taylor's case, however, revealed that Dr. Doe never created a written protocol for executions.[24] In fact, he varied the amount of thiopental

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[22] Tr. of Test. of John Doe No.1 at 19-20, 22, *Taylor v. Crawford*, No. 05-4173 (W.D. Mo. June 5, 2006); Jeremy Kohler, *Behind the Mask of the Execution Doctor*, St. Louis Post-Dispatch, July 30, 2006, at A1.

[23] Tr. of Test. of John Doe No.1 at 19-20, 22, *Taylor v. Crawford*, No. 05-4173 (W.D. Mo. June 5, 2006).

[24] During his deposition, Dr. Doe was asked the following: "Q: [T]here's no guide that you follow as you're doing it? A: Ab-

he gave inmates on a whim, without informing anyone.[25] He testified that he had recently begun giving inmates, at most, half the amount of thiopental than he had previously given, because a change in the drug packaging forced him to "improvise."[26] He could not say how much thiopental he had administered in any particular execution, and his poor recordkeeping renders it impossible to reconstruct the dose after the fact.[27] Dr. Doe also suffers from dyslexia, and admitted that "[i]t is not unusual for me to make mistakes," such as transposing numbers.[28] By his own estimate, he had been sued for malpractice more than 20 times, and reprimanded by the State Board of Healing Arts for concealing the malpractice suits from the hospitals where he was a treating physician.[29]

Dr. Doe supervised 54 executions in Missouri.[30] However, during *amicus* Taylor's litigation challenging Missouri's lethal injection procedures, Dr. Doe testified that he was "still improvising" the execution procedures.[31] Despite the fact that the paralytic ef-

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solutely not. Q. So you just rely on your memory? A. Yes." *Id.* at 70.

[25] *Id.* at 13-19.

[26] *Id.* at 9-12, 24.

[27] *Id.* at 14-18.

[28] *Id.* at 25.

[29] Jeremy Kohler, *Behind the Mask of the Execution Doctor*, St. Louis Post-Dispatch, July 30, 2006, at A1.

[30] *Id.*

[31] Tr. of Test. of John Doe No. 1 at 10, *Taylor v. Crawford*, No. 05-4173 (W.D. Mo. June 5, 2006).

fect of the pancuronium ensures that executions will look the same regardless of whether adequate anesthesia is given, Dr. Doe believed that he could vary the way he carried out executions as long as his changes did not make any "visible difference" in the appearance or length of the execution.[32]

The State of Missouri was well aware of Dr. Doe's professional disrepute. The Office of the Attorney General both defended the *Taylor* litigation and signed off on the discipline of Dr. Doe.[33] Yet the state fought to keep Dr. Doe's identity a secret and said that it would not hesitate to allow him to continue to carry out executions.[34] The U.S. District Court for the Western District of Missouri, however, ordered that Dr. Doe "shall not participate in any manner, at any level, in the State of Missouri's lethal injection process."[35]

Dr. Doe's manifest incompetence is not an aberration. In fact, public filings in the federal lethal injection litigation reveal that the Federal Government

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[32] *Id.* at 23.

[33] Jeremy Kohler, *Behind the Mask of the Execution Doctor*, St. Louis Post-Dispatch, July 30, 2006, at A1.

[34] Trial Tr. at 387-392, *Taylor v. Crawford*, No. 05-4173 (W.D. Mo. June 13, 2006) (testimony of Larry Crawford, Director, Mo. Dept. of Corrections).

[35] *Taylor v. Crawford*, No. 2:05-CV-04173-FJG, at 2, (W.D. Mo. Sept. 12, 2006) (Order). The State appealed that order. Several months after appellate argument, the Attorney General represented to the court that Dr. Doe would no longer participate in executions in Missouri. *See* Letter from Michael Pritchett, Assistant Attorney General of Missouri, to Michael Gans, Clerk, U.S. Court of Appeals, 8th Cir. (Apr. 17, 2007).

uses the very same Dr. Doe to develop execution procedures, place and monitor intravenous lines, and monitor levels of consciousness.[36] In other words, the Federal Government chose to rely upon the only person in the country who has been explicitly barred by a federal court from participating in lethal injection executions.

Other jurisdictions fare no better when it comes to the selection and screening of the individuals who are responsible for developing and carrying out the execution procedures. In California, former San Quentin Prison Warden Steven Ornoski – who presided over the executions of Stanley Williams, Clarence Ray Allen, and the scheduled execution of *amicus* Morales[37] – testified that there are no rules or regulations that require him to evaluate the "bona fides" of the team members.[38] No warden or supervisor ever reviewed any of the team members' qualifications, experience, training, or personnel files.[39] The *Morales* litigation record reveals that the execution team leader was disciplined for smuggling illegal drugs into San Quentin Prison, yet was subse-

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[36] Pls.' and Intervenor Pls.' Opp'n to Def.'s Mot. and Corrected Mot. for J. on the Pleadings and Mot. to Lift the Stay of the Pls.' Executions at 38-40. *Roane v. Gonzales*, No. 05-2337 (D.D.C. Oct. 10, 2007) (redacted version, publicly filed).

[37] Williams was executed on December 13, 2005 and Allen was executed on January 17, 2006. *Morales v. Hickman*, 415 F. Supp. 2d 1037, 1045 (N.D. Cal. 2006).

[38] *Morales* Undisputed Facts at 3.

[39] *Id.* at 3-4.

quently appointed to the execution team.[40] The *Morales* litigation also uncovered the fact that "substantial" quantities of thiopental purportedly checked out for execution purposes had gone missing, and the federal judge suggested that a criminal investigation may be necessary to investigate the possible theft of thiopental by members of the execution team.[41]

B. Deficient and Incomprehensible Execution Procedures

Even if jurisdictions employed competent, qualified, and well-trained personnel to execute inmates, they would not be able to successfully implement lethal injection protocols that are incomprehensible, internally inconsistent, or fail to provide for foreseeable contingencies. Yet prison officials in many jurisdictions have put little stock in the development of professional, comprehensive procedures. They have routinely entrusted this complex responsibility to personnel with no medical training or prior experience with lethal injection. Often, they have merely

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[40] *Id.* at 3. The federal judge in the *Harbison* litigation lamented the fact that the Tennessee Department of Corrections did not screen potential execution team members for substance abuse or psychological disorders or test team members for drug use prior to the execution. "This is a particular issue because one of the paramedics – IV Team Member B – has a history of drug and alcohol addiction and psychological disorders." *Harbison v. Little*, No. 3:06-1206, 2007 WL 2821230, at *15 (M.D. Tenn. Sept. 19, 2007).

[41] *Morales v. Tilton*, 465 F. Supp. 2d 972, 979 n.9 (N.D. Cal. 2006).

copied the deficient procedures from other jurisdictions.

1. Nonsensical protocols

In some cases, the protocols reflect a complete lack of attention to what should be a rigorous and scientifically-vetted process. In Tennessee, the carelessness with which the protocol was drafted bordered on the absurd. In that state, the written lethal injection protocol included substantial elements of the old protocol for execution by electrocution.[42] Purportedly used by Tennessee officials in two executions (including one in June of 2006), the protocol instructed prison officials to shave the inmate's head and legs[43] and to have a fire extinguisher nearby prior to the lethal injection.[44] If the prison officials were to follow the protocol's further instructions to the letter, they would first "check the electrodes to insure that they are properly attached," then "proceed to electrical control panel and activate for execution," and the executioner would then "engage the automatic rheostat," which turns on the electric voltage. After the "cycle runs its course" the facility manager would "disconnect electrical cables in rear of chair." Finally, "following the completion of the

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[42] Tennessee Governor Phil Bredesen called the written directives a "cut and paste job." Sheila Burke, *Tennessee Will Lift Ban on Executions*, Tennessean, May 1, 2007, at 1A.

[43] State of Tennessee, Manual of Execution: Lethal Injection, at 34 (Oct. 1, 2006) (rescinded by Executive Order Feb. 1, 2007).

[44] *Id.* at 6.

lethal injection process," the physician will enter and conduct an examination.[45]

Tennessee is not alone. Protocols in other states also have inexplicable provisions that reflect at best, a misunderstanding of the drugs and equipment used in the three-drug formula, and at worst, a callous disregard for the danger inherent in that procedure. For example, at least two jurisdictions, including North Carolina and Oklahoma, have called for administration of the anesthetic drug after the inmate has already been executed.[46] The revised federal protocol, in a procedure that needlessly exalts anonymity over safety, calls for the use of a "blank" IV line that is not connected to the inmate, but rather connects to an empty container.[47] This procedure ostensibly protects the execution team members from knowing which member is administering the chemicals to the inmate and which is simply injecting chemicals into an empty container.[48] However, not only does this procedure add unnecessary complications to the execution process by requiring the

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[45] *Id.* at 35-36.

[46] Aff. of Marvin L. Polk at 2. *Page v. Beck*, No. 5:04-CT-04-BO (E.D.N.C. Jan. 6, 2004); Decl. of Dr. Mark J.S. Heath at 17, *Patton v. Jones*, No. 06-591 (W.D. Okla. July 27, 2006).

[47] Ex. 4R, *Addendum to Bureau of Prisons Execution Protocol Federal Death Sentence Implementation Procedures* (effective July 1, 2007) at 3; Decl. of Dr. Mark J.S. Heath, *Roane v. Gonzales*, No. 05-2337 (D.D.C. Sept. 7, 2007) (redacted version, publicly filed).

[48] Decl. of Dr. Mark J.S. Heath at 24, *Roane v. Gonzales*, No. 05-2337 (D.D.C. Sept. 7, 2007) (redacted version, publicly filed).

preparation of as many as 20 extra drug syringes,[49] it would only accomplish its apparent purpose if the executioners had been so poorly trained that they could not tell the difference between injecting a syringe into an empty container and injecting a syringe intravenously into a human being.[50]

2. Dangerously inappropriate priorities

There is ample reason to question whether officials in some jurisdictions grasp the seriousness of their constitutional responsibilities. In California, for example, former Warden Ornoski testified that "he believes that a 'successful execution' is simply one where 'the inmate ends up dead at the end of the process.' When asked whether he considered a successful execution to mean anything else, he responded, 'I'm thinking not.'" *Morales*, 465 F. Supp. 2d at 983 n.14.

To the extent that states do carefully consider aspects of their lethal injection protocols, inappropriate concerns are often paramount. Certainly one example is the use of pancuronium bromide, which protects the witnesses from watching an unpleasant death but also masks the ability of anyone except well-trained and experienced professionals to know whether the inmate is experiencing searing pain or conscious suffocation.[51] But there are other exam-

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[49] *Id.*

[50] *Id.*

[51] Dr. Mark Dershwitz, an expert for the state in many jurisdictions, including Kentucky, recently testified in a deposition that the principal benefit of using pancuronium is its effect

ples of inappropriate priorities. In Missouri, Dr. Doe testified that the Director of the Department of Corrections relies on him to "keep [the Director] looking good . . . so [the Director] does not have to go out and explain why we made a mistake or we may have a problem or why it didn't go smoothly."[52] In Tennessee an executive commission recommended that the state use a one-drug method similar to that used in animal euthanasia, in order to reduce the risk of conscious suffering during lethal injections. *Harbison*, 2007 WL 2821230, at *3-5. They made this advisement after consulting with medical experts, including the State of Kentucky's expert, Dr. Dershwitz, who recommended a one-drug protocol to the commission. *Id.* at *3. Nonetheless, the Commissioner of the Department of Corrections, who had no medical training, rejected all of the committee's suggestions. He eventually admitted that he had done so because he did not want "Tennessee to be at the forefront of making the change from the three-drug protocol to the one-drug protocol" and that he thought adoption of a one-drug protocol could lead to "political ramifications." *Id.* at *7.

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on execution witnesses: "Q. Is there anything beneficial that pancuronium does for the inmate? A. Not the inmate directly. Q. And indirectly? A. It may decrease the misperception of these involuntary movements as consistent with suffering on the part of the witnesses, including the inmate's family. Q. But for the inmate himself? A. I said no." Dep. Tr. vol. I at 119-120, *Jackson v. Danberg*, No. 06-CV-300 (D. Del. Sept. 10, 2007) (testimony of Dr. Mark Dershwitz).

[52] Tr. of Test. of John Doe No. 1 at 62, *Taylor v. Crawford*, No. 05-4173 (W.D. Mo. June 5, 2006).

3. Remote administration and inadequate assessment of anesthetic depth

In many lethal injection jurisdictions, the execution team members administer the lethal drugs and monitor the inmate from a remote location. Remote administration prevents the execution team members from properly assessing whether the inmate is receiving the anesthesia and whether the anesthesia achieves the desired effect. Remote administration increases the risk of error, from improper pushing of the drugs, to unnecessarily lengthy lines of tubing that can malfunction. Dr. Dershwitz has acknowledged that, during the induction of even routine anesthesia in a medical setting, the anesthesiologist stands in the same room as the patient, immediately adjacent to the inmate's IV site. He or she injects anesthetic drugs, carefully attuned to the needs of the patient, from this bedside location. Dr. Dershwitz has further acknowledged that "Standard I" in the American Society of Anesthesiologists' Minimal Monitoring Standards requires continuous bedside monitoring.[53]

Despite the undisputed importance of closely monitoring the IV line, many states provide only for remote monitoring. Because states insist on executioner anonymity, they have used separate rooms for infusion of the chemicals. This requires remote administration, often through lengthy tubing. For example, in California, the federal judge found that

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[53] Trial Tr. at 113-14, *Evans v. Saar*, No. 06-149 (D. Md. Oct. 11, 2006) (testimony of Dr. Mark Dershwitz).

"[t]he lighting is too dim, and the execution team members are too far away, to permit effective observation of any unusual or unexpected movements by the condemned inmate, much less to determine whether the inmate is conscious." *Morales*, 465 F. Supp. 2d at 980. Similarly, a federal judge found that the Tennessee lethal injection system, where the executioners administer the lethal chemicals and monitor the IV lines from a tiny, poorly lit room outside of the execution chamber, was inadequate and increased the inmate's risk of experiencing unnecessary pain. *Harbison*, 2007 WL 2821230, at *9, *19.

Remote administration creates a foreseeable risk of inadequate administration of anesthesia. So too do protocols that call for token checks for consciousness but no real assessment of anesthetic depth.

Potassium chloride is excruciatingly painful, similar to a "surgical stimulus." J.A. 604. Inmates therefore must be placed in a surgical plane of anesthesia to ensure that they do not wake up upon injection of the potassium – after they are already paralyzed. Verifying a surgical plane of anesthesia, particularly in paralyzed individuals, is a complex task that requires synthesizing many subtle indicia of responsiveness. It can only be performed reliably by persons with advanced training in anesthesia.[54]

A number of jurisdictions have begun to tweak their lethal injection protocols in a way that purports

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[54] Post-Trial Decl. of Dr. Mark J.S. Heath at 15, *Morales v. Tilton*, No. C06-0219, C06-926 (N.D. Cal. Nov. 9, 2006).

to measure anesthetic depth. The impetus to assess anesthetic depth comes, presumably, from a realization on the part of prison officials that there is indeed a risk of excruciating pain if the first drug is not properly administered.[55] Despite this implicit acknowledgement, many jurisdictions do not adequately monitor the delivery of anesthesia to the inmate, nor do they properly assess anesthetic depth prior to administering the second and third drugs. For example, the Federal Bureau of Prisons provides that the execution team should wait to administer the paralytic until the inmate looks "sleepy."[56] There is no explanation of how to make this determination, to what level of anesthetic depth "sleepy" is supposed to correspond, or what steps to take if the inmate does not seem "sleepy."[57]

In North Carolina, an earlier incarnation of the state's protocol called for the Warden to determine whether "an inmate was unconscious upon hearing the inmate's 'snoring.'"[58] After several legal challenges, prison officials persuaded a federal court to permit an execution to proceed, in part, by represent-

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[55] In contrast, the lethal injection protocol in some jurisdictions, including Kentucky, provides for no assessment of either consciousness *or* anesthetic depth. The federal judge in Tennessee referred to this failure as "the most glaring omission in the new protocol." *Harbison*, 2007 WL 2821230, at *12.

[56] Ex. 48, *Protocol Lead Script*, Decl. of Dr. Mark J.S. Heath, *Roane v. Gonzales*, No. 05-2337 (D.D.C. Sept. 7, 2007) (redacted version, publicly filed).

[57] *Id.*

[58] *Conner v. N.C. Council of State*, No. 07-GOV-0238, 07-GOV-0264, at 12 (N.C. O.A.H. Aug. 9, 2007).

ing to the court that a physician would monitor the inmate's consciousness throughout the execution. *Brown v. Beck*, No. 5:06-CT-3018-H, 2006 WL 3914717, at 4-5, (E.D.N.C. Apr. 17, 2006) (final order denying preliminary injunction). However, the physician present at the execution was never told of this requirement, and in fact later testified that he had not monitored the inmate's consciousness during the execution process.[59]

Several other jurisdictions have added steps to their protocols that call for shaking the inmate, poking him, or calling his name. These steps, however, do not permit an assessment of anesthetic depth and betray a fundamental misunderstanding of the nature of the inherent risks in the three-drug formula.[60]

The "consciousness check" some jurisdictions are now instituting does not come close to verifying sufficient anesthetic depth. These jurisdictions propose to have personnel with little or no medical training shake or touch the inmate and look for a physical re-

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[59] Hr'g Tr. at 245-50, *Conner v. N.C. Council of State*, No. 07-GOV-0238, 07-GOV-0264 (N.C. O.A.H. May 21, 2007) (testimony of Dr. Obi Umesi).

[60] Dr. Doe, Missouri's former executioner and one of the Federal Government's lethal injection consultants, demonstrated this fundamental misunderstanding when he testified that "the only thing that can be monitored [during the execution] is facial expression and you can judge when the effect of the drug is accomplished, and that can be seen from across a room through a window." *Taylor v. Crawford*, No. 05-4173-CV-C-FJG, 2006 WL 1779035, at *6 (W.D. Mo. June 26, 2006).

sponse. [61] For example, in Indiana, after the thiopental has been injected into the IV, the Warden examines the IV site and looks for "signs of consciousness."[62] Warden Ed Buss testified, "I walk around the offender. I look for any signs of consciousness. I say his name. I touch him. . . . Maybe a gentle shake to see if we can detect any consciousness."[63] In Alabama, a recent addition to the state's lethal injection protocol calls for a prison guard to check that the inmate is unconscious by calling the inmate by name, brushing his eyelashes with a finger, and pinching his arm. A spokesman for the Alabama Department of Corrections stated that the new procedure is "simply a consciousness check."[64]

These procedures may indicate that an individual is lightly unconscious, or sleeping, but cannot indicate any more than that, and may be unreliable even on that point. One could poke, or speak to, a sleeping person without eliciting a response, but one would never assume from that reaction that the sleeping person could therefore be injected with a drug that causes searing pain upon administration. Moreover, given that many jurisdictions offer inmates strong sedatives prior to their executions, inmates may be aware, but unable to provide a discernible response to the "consciousness check." And,

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[61] *See* Decl. of Dr. Mark J.S. Heath at 4, *Taylor v. Crawford*, No. 05-4173 (W.D. Mo. July 24, 2006).

[62] Trial Tr. at 199, *Timberlake v. Buss*, No. 06-1859 (S.D. Ind. Apr. 26, 2007) (testimony of Warden Ed Buss)

[63] *Id.*

[64] Stan Diel, *State's New Execution Procedure Detailed*, Birmingham News, Oct. 26, 2007, at 1A.

of course, once the inmate is paralyzed, this check will be completely ineffectual, because no amount of poking, prodding, or shouting is capable of eliciting a response. Those gestures serve only to provide witnesses, and perhaps the execution team members themselves, with the false assurance that the appropriate level of anesthetic depth has been achieved.

4. Inadequate facilities

Finally, the lack of concern for anything other than a quick execution that "looks" painless is evident in the physical conditions under which lethal injections are conducted. The execution chambers in many jurisdictions were not designed for lethal injection executions and suffer from a number of critical deficiencies.[65] In most jurisdictions, prison officials administer lethal drugs from a small anteroom separated from the execution chamber. Often this anteroom is poorly lit, purposefully, so that witnesses cannot see into the chamber. For example, in California, after the team members set the IVs and leave the execution chamber, the lights are turned down.[66] During the execution of Clarence Ray Allen, the doctor filling out the execution record needed the aid of

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[65] California has recently spent approximately $800,000 rebuilding its execution chamber in an effort to correct some of the deficiencies in the facilities. Mark Martin, *Lawmakers Rip Governor Over Death Chamber*, S. F. Chron., May 9, 2007, at B1, but not before the state executed eleven people in a converted gas chamber that the court found increased the risk of improperly placed IVs and undetected problems. *Morales v. Tilton*, 465 F. Supp. 2d 972, 980 (N.D. Cal. 2006).

[66] *Morales* Undisputed Facts at 21.

a small flashlight to see what he was doing.[67] In Missouri, the personnel who administer the injections are in the dark and also use a small flashlight to identify the syringes. *Taylor v. Crawford*, No. 05-4173-CV-C-FJG, 2006 WL 1779035, at *5 (W.D. Mo. June 26, 2006). It is difficult enough for non-medical personnel to inject numerous syringes in a high-stress situation, without forcing them to manipulate the IV-syringe connections in a small, dark space, while juggling a flashlight, and attempting to inject the syringes in the correct order.

In California, the anteroom is not only poorly lit, but is often crowded with state officials on hand to witness the execution. *Morales*, 465 F. Supp. 2d at 980. As a result, execution team members have testified that "simple movement has been difficult." *Id.* Former warden Ornoski testified that during executions it was so crowded that he could do little more than "shuffle from side to side a foot or two."[68] He also testified that, during Clarence Ray Allen's execution, it was so crowded that he couldn't "move from my spot much, if any."[69] One execution team member, who was in charge of passing the drug syringes to the executioner, testified that the anteroom was so crowded that she would "have to kind of reach around people" when handing syringes to the executioner.[70]

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[67] *Id.*

[68] *Morales* Undisputed Facts at 16.

[69] *Id.*

[70] *Id.* at 48.

III. THE INCOMPETENT ADMINISTRATION OF LETHAL INJECTION PROCEDURES HAS RESULTED IN FORESEEABLE AND PREVENTABLE PROBLEMS IN NUMEROUS EXECUTIONS.

When unqualified personnel working in inadequate facilities perform a complicated and dangerous procedure with little margin for error, it should not be surprising when things go wrong. In the lethal injection context, when things go wrong, inmates suffer excruciating deaths. The so-called botched executions that have garnered widespread attention in the popular media are stark examples.[71] Because of the use of pancuronium and the paucity of execution data, it is unknown how many other botched executions have gone unnoticed. What is significant about the executions that have gone awry is that they can be traced back directly to the "pervasive lack of professionalism" in the development and oversight of the lethal injection process in many jurisdictions. What gives the botched executions constitutional significance is that they were foreseeable and preventable.[72]

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[71] *See, e.g.*, John Mangels, *Condemned Killer Complains Lethal Injection "Isn't Working,"* Cleveland Plain Dealer, May 3, 2006, at A1; Sonja Clinesmith, *Moans Pierced Silence During Wait*, Arkansas Democrat Gazette, Jan. 26, 1992, at 1B; Adam Liptak, *After Problem Execution, Governor Bush Suspends the Death Penalty in Florida*, N.Y. Times, Dec. 16, 2006, at A11.

[72] "[I]mplementation of lethal injection is broken, but it can be fixed." *Morales v. Tilton*, 465 F. Supp. 2d 972, 974 (N.D. Cal. Nov. 27, 2006).

Perhaps the best example of the subtlety with which insufficient anesthesia can manifest itself is provided by California execution records. In at least six out of the past eleven executions by lethal injection in California, execution logs indicated that inmates continued to breathe for far longer than the state's expert asserted would be expected in inmates who had received the full dose of thiopental. *Morales*, 465 F. Supp. 2d at 975 n.3. These inmates were likely not deeply anesthetized, and therefore may have been conscious when the execution team injected them with pancuronium bromide and potassium chloride. *Morales*, 465 F. Supp. 2d at 975 (citing *Morales v. Hickman*, 415 F. Supp. 2d 1037, 1045 (N.D. Cal. 2006)). Indeed, the state's own expert, Dr. Robert Singler, later acknowledged that based on the continued breathing and "the heart rates reflected in the execution log, [Robert Lee Massie, executed in March of 2001] well may have been awake when he was injected with potassium chloride." *Id.* at 980.[73]

What is particularly disturbing about the California evidence is that execution personnel recorded the vital signs, but were insufficiently trained in anesthesia to recognize the significance of their observations, and never thought to investigate further. *See generally Morales*, 415 F. Supp. 2d at 1044-1045. As a result, several inmates were executed while exhibiting signs of inadequate anesthesia. Of course, the use of pancuronium renders it impossible to de-

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[73] The only reason Dr. Singler could not be more definitive was "principally because of the poor quality of the log itself." *Id.*

termine with certainty whether these executions were humane.

Sometimes lethal injection executions go wrong in obvious and gruesome ways. Usually that is the case when prison officials – untrained, unqualified, and poorly supervised – have difficulties establishing and maintaining venous access. These difficulties introduce the very real risk that the inmate will not properly receive the anesthetic and will be injected with pancuronium bromide and potassium chloride while conscious but paralyzed. Infiltration, for example, occurs when a catheter is placed improperly and the thiopental enters the tissue surrounding the vein instead of the vein itself.[74] It prevents the full dose of thiopental from reaching the central nervous system and thus may result in inadequate anesthesia.[75] Similarly, sometimes veins perforate, leak, or rupture while an execution team member is inserting the catheter or injecting the thiopental, which causes some or all of the drug to leave the vein and enter the surrounding tissue.[76] In other cases, the IV tubes themselves leak, preventing some or all of the drugs from reaching the inmate's veins.[77]

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[74] Decl. of Dr. Mark J.S. Heath at 11-12, *Morales v. Hickman*, No. C06-0219, C06-926 (N.D. Cal. Jan. 12, 2006).

[75] *Id.*

[76] *Id.*

[77] *Id.* In Maryland, state officials admitted that, during the execution of Tyrone Gilliam on November 16, 1998, the IV was administered incorrectly and that the "IV line leaked and a small puddle of liquid formed on the floor." Def.'s Answer to Compl. at 6-7, *Evans v. Saar*, No. 06-149 (D. Md. Mar. 13, 2006). *See also Oken v. Sizer*, 321 F. Supp. 2d 658, 667 n.7 (D.

Recent executions in several states demonstrate the foreseeable problem of infiltration and its consequences to the entire execution process. When the State of Florida executed Angel Diaz on December 13, 2006, "it is undisputed that . . . the intravenous lines were not functioning properly because the catheters passed through [Diaz's] veins in both arms and this delivered the lethal chemical into soft tissue, rather than into his veins." *Lightbourne v. McCollum*, No. SC06-2391, 2007 WL 3196533, at * 15 (Fla. Nov. 1, 2007). Eyewitness reports and an autopsy investigation by the Medical Examiner for the Eighth District of Florida lead to the conclusion that Diaz was likely not properly anesthetized during the execution.[78] For over twenty minutes, Diaz was blinking, moving around, gasping for air, grimacing, struggling to breathe, trying to speak, and clenching his jaw.[79] Despite signs that the anesthetic was not working, the execution team injected the second and third drugs, and then administered the entire three drug sequence a second time.[80] An autopsy revealed that Diaz had fluid-filled, one-foot long blisters on

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Md. 2004) (noting that the State conceded that the IV "was maladministered and dripped" during Gilliam's execution in 1998).

[78] Hr'g Tr. vol. IV at 171-74, Governor's Commission on Administration of Lethal Injection (Feb. 12, 2007) (testimony of Dr. William Frank Hamilton).

[79] *See* Chris Tisch, *Governor Bush Halts Executions*, St. Petersburg Times, Dec. 16, 2006, at 1A.

[80] *See, e.g.*, Hr'g Tr. vol IV at 46-47, Governor's Commission on Administration of Lethal Injection (Feb. 19, 2007) (testimony of George B. Sapp).

both of his arms, indicating that the IV sites had malfunctioned and did not properly deliver the drugs into his veins.[81] The Florida Supreme Court recently acknowledged that "the execution of Diaz raised legitimate concerns about the adequacy of Florida's lethal injection procedures and the ability of the DOC to implement them." *Lightbourne,* 2007 WL 3196533, at * 16. As noted above, then-Governor Jeb Bush's commission on lethal injections concluded that the prison employees assigned to the Diaz execution, the ones who had so much trouble injecting the drugs into Diaz' veins, were not properly trained to do their jobs.[82]

The Ohio execution of Joseph Clark on May 2, 2006 was initially delayed for approximately twenty-two minutes while a group of technicians searched for a vein in which to insert an intravenous line.[83] Four minutes after the execution team began administering the lethal chemicals, Clark lifted his head up and said, "[i]t's not working."[84] Prison officials then determined that Clark's vein collapsed.[85] The paramedics spent more than half an hour attempting to

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[81] Hr'g Tr. vol. IV at 164-66, Governor's Commission on Administration of Lethal Injection (Feb. 12, 2007) (testimony of Dr. William Frank Hamilton).

[82] Governor's Commission on Administration of Lethal Injection, Final Report with Findings and Recommendations, at 8 (Mar. 1, 2007).

[83] *See, e.g.*, Adam Liptak, *Trouble Finding Inmate's Vein Slows Lethal Injection in Ohio*, N.Y. Times, May 3, 2006, at A16.

[84] *Id.*

[85] *Id.*

insert another IV.[86] The execution continued and officials pronounced Clark dead nearly ninety minutes after the execution commenced.[87] An independent autopsy examination later indicated a total of nineteen needle puncture wounds.[88]

After the thiopental injections began in the Oklahoma execution of Lloyd LaFevers on January 30, 2001, several witnesses observed him raise his head off the bed, breathe deeply, as if he were gasping for air.[89] An autopsy performed the next day by the State Medical Examiner found it likely that one of LaFevers' IVs had infiltrated during the execution.[90] A federal judge in Oklahoma heard testimony regarding LaFevers' and noted that "something did go awry and most regrettably so."[91]

The State of California executed Stanley Williams on December 13, 2005. *Morales*, 415 F. Supp. 2d at 1045. A Registered Nurse on the execution team, who was responsible for setting one of the catheters in Williams' arms, made two unsuccessful

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[86] *Id.*

[87] *Id.*

[88] Autopsy Report for Joseph Clark, Dr. L.J. Dragovic, Office of the Medical Examiner, Oakland County, Michigan (Aug. 15, 2006), at 2.

[89] *See, e.g.*, Aff. of Catherine Burton at 1, *Patton v. Jones*, No. 06-591 (W.D. Okla. Feb. 19, 2004); Decl. of Patrick J. Ehlers at 2, *Patton v. Jones*, No. 06-591 (W.D. Okla. Mar. 1, 2004).

[90] Autopsy Report for Lloyd LaFevers, Dr. Larry Balding, Office of the Chief Medical Examiner, Oklahoma City, Oklahoma (Jan. 31, 2001).

[91] Prelim. Inj. Tr. at 235, *Patton v. Jones*, No. 06-591 (W.D. Okla. Aug. 8, 2006).

attempts to set the catheter in the left arm, the backup line.[92] On the third attempt, it is likely that Williams' vein ruptured. The two medical personnel thought the line was working when they left the chamber, only to be told later that the IV line was still not flowing, and had failed.[93] Despite this failure, the Warden told the team to "proceed" and the team did so, "without the IV line in the left arm properly set or operating."[94] The difficulty setting the IV created a risk that both IVs would be compromised and the drugs would not be successfully delivered. It also demonstrates that the individuals selected for establishing IV access could not discern whether the IV was properly placed. Indeed, logs of Williams' execution indicated physical signs inconsistent with deep anesthesia.[95] The execution team apparently failed to fully appreciate this risk: the nurse who was unable to properly set the catheter in Williams' arm later testified that other execution team members' only response to the problem was "sh-t does happen."[96]

These are but a few examples of the ways in which the "pervasive lack of professionalism" has led to botched executions that are the direct, foreseeable result of the inadequate attention paid to the inherent risks of the three-drug protocol. The states, and the Federal Government, have *chosen* a three-drug

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[92] *Morales* Undisputed Facts at 18.

[93] *Id.*

[94] *Id.*

[95] *Morales*, 415 F. Supp. 2d at 1045 n.13.

[96] *Morales* Undisputed Facts at 54.

lethal injection formula that is fraught with risk. If they do nothing to ameliorate the risk, executions will go awry. If they ignore the foreseeable – and preventable – problems with the formula they have chosen, they do so at their constitutional peril.

CONCLUSION

For the foregoing reasons, the judgment of the Kentucky Supreme Court should be reversed.

Respectfully submitted,

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AMICUS CURIAE BRIEF

No. 07-5439

In the Supreme Court of the United States

RALPH BAZE, *ET AL.*,
Petitioners,

v.

JOHN D. REES, *ET AL.*,
Respondents.

On Writ of Certiorari
to the Supreme Court of Kentucky

BRIEF OF THE STATES OF TEXAS, ALABAMA, ARKANSAS, COLORADO, CONNECTICUT, DELAWARE, FLORIDA, GEORGIA, IDAHO, KANSAS, MISSISSIPPI, MISSOURI, MONTANA, NEVADA, OKLAHOMA, SOUTH CAROLINA, SOUTH DAKOTA, TENNESSEE, UTAH, AND WYOMING, AS *AMICI CURIAE* IN SUPPORT OF RESPONDENTS

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QUESTIONS PRESENTED

Lethal injection is the primary or only method of execution provided for by the federal government, the United States military, and 37 States—comprising nearly every death-penalty State in America. The vast majority of these States' lethal-injection procedures employ the same three-drug combination used in Kentucky. In this case, there is no disagreement that Kentucky's lethal-injection protocol is designed to result in a painless death, and when properly implemented will result in a painless death.

1. Does Kentucky's lethal-injection protocol violate the Eighth Amendment's prohibition of cruel and unusual punishment because it is inconsistent with standards of decency at the Founding, inconsistent with modern standards of decency, or inherently cruel and unusual?

2. If the Court adopts the Kentucky courts' formulation of the applicable Eighth Amendment standard, does Kentucky's lethal-injection protocol violate the Eighth Amendment because it creates a substantial risk of wanton or unnecessary infliction of pain, torture, or lingering death?

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INTEREST OF *AMICI CURIAE*

The state *amici curiae,* through their Attorneys General, respectfully submit this brief in support of Respondents. The States have a vital interest in the administration of criminal justice, particularly as applied to capital crimes committed against their citizens. Lethal injection is now the default method for execution in 37 States, comprising every death-penalty State save Nebraska. *See* Note, *A New Test for Evaluating Eighth Amendment Challenges to Lethal Injections*, 120 Harv. L. Rev. 1301, 1301-02 (March 2007) (citation omitted). Thus, the consensus in favor of lethal-injection among the States that have the death penalty is both strong and current.

The consensus in favor of a three-drug protocol like Kentucky's is also powerful. According to two recent studies conducted by one commentator, "with two negligible exceptions, *all* states that reported their lethal injection drugs shared the same three-chemical combination." *See* Deborah W. Denno, *The Lethal Injection Quandary: How Medicine Has Dismantled the Death Penalty*, 76 Fordham L. Rev. 49, 97 (Oct. 2007) (emphasis added).

Finally, it is undisputed that Kentucky's lethal-injection protocol—like the protocols in the other lethal-injection States—is designed to result in a painless death. If Petitioners' challenge to the constitutional validity of the three-drug lethal-injection protocol used by the vast majority of death-penalty States is nonetheless successful, that decision will directly and profoundly impact the administration of criminal justice in the *amici* States. Under such circumstances, the lethal-injection procedures used throughout the country would likely have to be substantially revised, potentially requiring action by some 37 state legislatures to meet whatever new requirements might be set forth by the Court.

SUMMARY OF THE ARGUMENT

This case concerns whether Kentucky's three-drug lethal-injection protocol violates the Eighth Amendment's prohibition of "cruel and unusual punishment." The Court should hold that it does not.

In determining whether a government's punishment of an individual is "cruel and unusual," the Court has held that it will judge a government's conduct by contemporary standards of morality. Reasoning that the best measurement of contemporary morality is objective evidence of national consensus, the Court has historically looked to the conduct of the majority of States to discern contemporary values.

In this case, the national consensus could not be more clear: measured by the conduct of state governments, the American people overwhelmingly accept lethal injection by protocol similar or identical to that of Kentucky. Accordingly, the Court should conclude that Kentucky's lethal-injection protocol is entirely consistent with modern standards of morality, and is therefore also consistent with the requirements of the Eighth Amendment.

Kentucky's protocol is also wholly unlike those punishments that the Court has described as being cruel and unusual. Punishments that the Court has described as violating the Eighth Amendment's prohibitions involve "torture," barbarity, and inherent cruelty—like drawing and quartering, public dissection, or being burned alive. Because even Petitioners appear to concede that lethal injection itself is *not* inherently cruel, the Court should uphold the constitutionality of Kentucky's protocol.

Lethal injection by Kentucky's protocol is also in no way "unusual." Indeed, nearly every State that administers lethal injection does so by a protocol similar or identical to Kentucky's methodology. The Eighth Amendment's inclusion of the term

"unusual" in its prohibition requires an unconstitutional punishment to be just that—unusual. Because lethal injection by the three-drug protocol cannot accurately be described as an "unusual" punishment in the modern world, it does not run afoul of the Eighth Amendment.

Finally, the Court should uphold the constitutionality of Kentucky's three-drug protocol because Petitioners have failed to make a factual case that meets even their own, minimal standard for determining whether a punishment is constitutional—whether it results in a "significant and unnecessary risk of severe pain." *See* Petitioners' Br. 32. Petitioners' own expert readily concedes that if the protocol is successfully administered, the resulting death will be a humane one. In addition, Petitioners have offered no evidence that pain will result from the protocol with *any* degree of likelihood—causing Petitioners to fail to meet their own proposed standard.

For these jurisprudential and factual reasons, the Court should hold that Kentucky's lethal-injection protocol does not violate the Eighth Amendment's prohibition of "cruel and unusual" punishment.

ARGUMENT

Petitioners urge that Kentucky's chosen method of execution, involving a three-drug lethal-injection protocol, violates the Eighth Amendment. The Court last addressed the question whether a method of execution is "cruel and unusual," and therefore violates the Eighth Amendment, 60 years ago. *See Louisiana ex rel. Francis* v. *Resweber*, 329 U.S. 459 (1947). In order to answer the question concerning Kentucky's lethal-injection protocol, the Court must first set forth the appropriate criteria for determining whether an execution procedure is "cruel and unusual."

The Supreme Court of Kentucky evaluated the validity of Kentucky's lethal-injection protocol under the Eighth Amendment by applying the following test: "The method of execution must not create a substantial risk of wanton or unnecessary infliction of pain, torture or lingering death." *Baze* v. *Rees*, 217 S.W.3d 207, 211 (Ky. 2006); J.A. 805. Respondents explicitly endorse this test, and recommend that it be applied by this Court. Respondents' Br. 25.

Petitioners assert that they reject this test, but their formulation of the appropriate Eighth Amendment test is essentially the same as the test applied by the Kentucky court. Specifically, Petitioners argue that the test should be as follows: "[A] method of execution is administered unconstitutionally if the procedures in question impose a significant and unnecessary risk of severe pain that could be prevented by the adoption of reasonable safeguards or alternative procedures." Petitioners' Br. 32. Petitioners argue that this test is substantively different from that applied by the Kentucky Supreme Court, particularly—and oddly—contending vigorously that the Kentucky court's critical mistake was that it looked for "substantial" risk rather than "significant" risk in its analysis. *See* Petitioners' Br. 41-43. But the words "substantial" and "significant" are synonyms, WILLIAM C. BURTON, BURTON'S LEGAL THESAURUS 554 (4th ed. 2007), and so Petitioners' formulation in this regard is not substantively different than that of the Kentucky court. And, because the Kentucky court's test expressly incorporates analysis of whether there is "unnecessary" infliction of pain, it likewise incorporates the other elements of Petitioners' test. J.A. 805.

Amici States believe that the Kentucky Supreme Court applied an incorrect test to evaluate the constitutional validity of Kentucky's lethal-injection protocol, albeit reaching the correct conclusion that the protocol is constitutional. Simply put, there is no support in this Court's prior method-of-punishment jurisprudence for the Kentucky Supreme Court's

formulation that a method of punishment must not involve a "substantial risk" of unnecessary pain or lingering death.

Rather, this Court's jurisprudence points to the application of a two-part test to determine whether a government's method of punishment violates the Eighth Amendment's prohibition. First, the Court should ask whether a consensus of States has developed for or against the challenged punishment. *See infra* Section I.A.2-4. And second, giving substantial weight to the national consensus, if any, the Court should engage in a limited inquiry into whether the challenged method is both inherently cruel *and* unusual. *See infra* Section I.B. When, as in this case, the challenged punishment is not opposed by a consensus of States and also is not unusual and inherently cruel, the punishment at issue should be upheld as fully consistent with the Eighth Amendment.

If, however, the Court were to adopt the Kentucky Supreme Court's standard that the method of execution must not "create a substantial risk of wanton or unnecessary infliction of pain, torture or lingering death," J.A. 805, the Court should nonetheless affirm the constitutionality of Kentucky's lethal-injection protocol. As the Kentucky courts correctly concluded, the record evidence in this case simply cannot support the conclusion that the implementation of Kentucky's protocol creates a substantial risk that Petitioners will suffer unnecessary pain when they are executed, nor that their executions will involve anything like "torture" or "lingering death."

Accordingly, under either *amici* States' proposed standard or under the standard applied by the Kentucky Supreme Court, the Court should uphold the constitutionality of Kentucky's three-drug lethal-injection protocol.

I. KENTUCKY'S LETHAL-INJECTION PROTOCOL DOES NOT VIOLATE THE EIGHTH AMENDMENT BECAUSE IT IS OVERWHELMINGLY ACCEPTED UNDER CONTEMPORARY MORAL STANDARDS AND IS NOT INHERENTLY CRUEL AND UNUSUAL.

The Court's precedent in Eighth Amendment challenges to methods of punishment points to two questions to be answered in evaluating the constitutional validity of Kentucky's lethal-injection protocol. First, has a national consensus developed against the challenged method of punishment? And second, is the challenged method so inherently cruel *and* "unusual" that the Court should eschew national consensus as a measurement of compliance with contemporary standards of morality? When, as in this case, the answer to both questions is "no," the Court should uphold the constitutionality of the challenged method of punishment.[1]

A. Kentucky's Lethal-Injection Protocol Is Overwhelmingly Accepted by Contemporary Moral Standards.

1. The Eighth Amendment's prohibition on "cruel and unusual punishment" permits well-settled punishments—like the death penalty—and is measured by the nation's "evolving standards of decency."

The Eighth Amendment to the United States Constitution states: "Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted." U.S. Const., Amend. VIII. Although the terms "cruel and unusual" have not been afforded precise meaning, their general prohibition on excessive punishment has been "firmly

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1. Notably, courts must presume the validity of a legislature's punishment. *Gregg* v. *Georgia*, 428 U.S. 153, 175 (1976).

established in the Anglo-American tradition of criminal justice." *Trop* v. *Dulles*, 356 U.S. 86, 100 (1958). The phrase "cruel and unusual" finds its source in the English Declaration of Rights of 1688, and its principles can be traced back to the Magna Carta. *Id.*

Though the term "cruel and unusual" is of English origin, "some scholars and authors maintain that the Cruel and Unusual Punishments Clause adopted a slightly different meaning than the meaning it carried in England." *See* Robert J. Sech, *Hang 'Em High: A Proposal for Thoroughly Evaluating the Constitutionality of Execution Methods*, 30 Val. U. L. Rev. 381, 395 (Fall 1995). Whereas the phrase in England is believed to have been intended to limit judicial excesses, it has been argued that the American Framers "were concerned with protecting individuals from methods of torture." *Id.*, at 396. "Today, most scholars agree that the clause, when adopted in America, was intended to apply to the methods of punishment, including modes of inflicting the death penalty." *Id.*

The Amendment recognizes the broad power of governments to punish criminal misconduct, but requires that punishments stay "within the limits of civilized standards." *Id.* Although "imprisonment and even execution" are clearly within the limits of civilized standards, "any technique outside the bounds of these traditional penalties is constitutionally suspect." *Id.* One intended purpose of the Amendment was to prevent cruelty from becoming "an instrument of tyranny." *Weems* v. *United States*, 217 U.S. 349, 373 (1910).

The precise limitations of the terms "cruel and unusual" are difficult to define. *Trop*, 356 U.S., at 100-101. Nonetheless, the Court has provided some guidelines. The Court has explained,

> "[d]ifficulty would attend the effort to define with exactness the extent of the constitutional provision which provides that cruel and unusual punishments shall not be inflicted; but it is safe to affirm that

> punishments of torture. . . and all others in the same line of unnecessary cruelty, are forbidden by that amendment to the constitution. Punishments are cruel when they involve torture or a lingering death; but the punishment of death is not cruel within the meaning of that word as used in the constitution. It implies there something inhuman and barbarous—something more than the mere extinguishment of life." *In re Kemmler*, 136 U.S. 436, 447 (1890) (internal quotations omitted).

The Court has also provided some examples of punishments that would violate the Eighth Amendment's proscription. Acts of "torture" and "unnecessary cruelty" are barred by the Amendment. *Wilkerson* v. *Utah*, 99 U.S. 130, 136 (1878). Such acts might include drawing and quartering, public dissection, or being burned alive. *Id.*, at 135. On the other hand, the Court has concluded that execution by firing squad falls safely within the range of punishments permitted by the Amendment. *Id.* at 134-35.

But while the meaning of the terms "cruel and unusual" is not defined with precision, the Court has made clear that their meaning is also "not static." *Trop*, 356 U.S., at 100-101. At a minimum, the Amendment "prohibits punishment considered cruel and unusual at the time the Bill of Rights was adopted." *Penry* v. *Lynaugh*, 492 U.S. 302, 330 (1989).

In addition, the Court's application of the Amendment recognizes the nation's "evolving standards of decency that mark the progress of a maturing society." *Trop*, 356 U.S., at 101. Put another way, the Amendment's meaning "is not fastened to the obsolete, but may acquire meaning as public opinion becomes enlightened by a humane justice." *Weems*, 217 U.S., at 378; *see also McCleskey* v. *Kemp*, 481 U.S. 279, 300 (1987) ("[O]ur constitutional decisions have been informed by 'contemporary values concerning the infliction of a challenged sanction.'").

2. Contemporary moral standards are best measured by objective consensus.

In discerning the nation's evolving moral standards, the Court looks to "objective evidence of how our society views a particular punishment today." *Penry*, 492 U.S., at 331. According to the Court, "[t]he clearest and most reliable objective evidence of contemporary values is the legislation enacted by the country's legislatures." *Id.* Thus, it is the values of the people—not a battle of experts or advocates—that best define the contemporary boundaries of the Eighth Amendment's ban on "cruel and unusual punishment."

When the Court recently analyzed whether the Eighth Amendment bars imposing the death penalty on mentally retarded individuals, for example, the Court looked to national consensus to measure contemporary moral standards of cruelty. *Atkins* v. *Virginia*, 536 U.S. 304, 313-18 (2002). The Court noted that since 1990, a significant number of States had enacted legislation barring the execution of mentally retarded individuals—and no States had enacted legislation expressly permitting such executions. *Id.*, at 314-16. The Court reasoned that such enactments provided "powerful evidence that today our society views mentally retarded offenders as categorically less culpable than the average criminal." *Id.*, at 316. The Court continued, "[t]he practice, therefore, has become truly unusual, and it is fair to say that a national consensus has developed against it." *Id.* And, seeing no reason to disagree with the consensus judgment of the States, the Court concluded that the execution of mentally retarded individuals is unconstitutionally excessive. *Id.*, at 321.

When the Court even more recently addressed whether the Eighth Amendment bars imposing the death penalty on juvenile offenders under 18, the Court again looked to national consensus to measure the Amendment's moral requirements.

Roper v. *Simmons*, 543 U.S. 551, 564-69 (2005). The Court observed,

> "[t]he prohibition against 'cruel and unusual punishments,' like other expansive language in the Constitution, must be interpreted according to its text, by considering history, tradition, and precedent, and with due regard for its purpose and function in the constitutional design. To implement this framework we have established the propriety and affirmed the necessity of referring to 'the evolving standards of decency that mark the progress of a maturing society' to determine which punishments are so disproportionate as to be cruel and unusual." *Id.*, at 560-61 (quoting *Trop*, 356 U.S., at 100-101).

Then, comparing the legislative trends regarding juvenile offenders with those analyzed in *Atkins*, the Court concluded that "[t]he evidence of national consensus against the death penalty for juveniles is similar, and in some respects parallel, to the evidence *Atkins* held sufficient to demonstrate a national consensus against the death penalty for the mentally retarded." *Roper*, 543 U.S., at 564. Specifically, the Court noted the "consistency" of direction of the States in trending towards the abolition of death penalty for juveniles. *Id.*, at 566. And, noting that "[a] majority of States have rejected the imposition of the death penalty on juvenile offenders under 18," the Court held that such imposition of the death penalty is barred by the Eighth Amendment. *Id.*, at 568.

When a national consensus has *not* developed against a government punishment, however, the Court has been equally careful to avoid declaring government conduct unconstitutional. For example, when there was no consensus among the States prohibiting execution of mentally retarded individuals, the Court reasoned that such executions did not offend the Eighth Amendment. *Penry*, 492 U.S., at 334-35 ("[A]t present, there is

insufficient evidence of a national consensus against executing mentally retarded people convicted of capital offenses for us to conclude that it is categorically prohibited by the Eighth Amendment."). And when the national consensus had not yet developed against execution of persons 16 or 17 years of age, a plurality of the Court likewise concluded that "such punishment does not offend the Eighth Amendment's prohibition against cruel and unusual punishment." *Stanford* v. *Kentucky*, 492 U.S. 361, 380 (1989).

Even more germane to this case, when a national consensus *supports* a government punishment, the Court has been exceedingly reluctant to declare that punishment to be "cruel and unusual" under contemporary moral standards. In *Tison* v. *Arizona*, 481 U.S. 137, 138 (1987), for example, the Court reviewed whether States may execute persons who substantially participate in a felony involving a murder. As in other cases, the Court expressly acknowledged the importance of "the state legislatures' judgment" when assessing whether a punishment violates contemporary norms. *Id.*, at 152. Noting that the consensus of States *authorized* the death penalty for persons substantially involved in felonies involving a murder, the Court concluded that the "substantial and recent legislative authorization of the death penalty for the crime of felony murder regardless of the absence of a finding of an intent to kill powerfully suggests that our society does *not* reject the death penalty as grossly excessive under these circumstances." *Id.*, at 154 (emphasis original). Accordingly, the Court concluded that death sentences for those who substantially participate in a felony murder can be constitutional. *Id.*, at 158.

To be sure, the Court has not always spoken with one voice as to the importance of national consensus in discerning contemporary moral standards. At times, the Court has so heavily relied on national consensus that it has "'emphatically reject[ed]' the suggestion that the Court should bring its own judgment to bear" in measuring moral standards. *Roper*, 543

U.S., at 562 (citing *Stanford*, 492 U.S., at 370-71); *see also McCleskey*, 481 U.S., at 300 ("In assessing contemporary values, we have eschewed subjective judgment, and instead have sought to ascertain 'objective indicia that reflect the public attitude toward a given sanction.'") (quoting *Gregg*, 428 U.S., at 173). Indeed, in *Stanford*, the Court explained as follows:

> "In determining what standards have 'evolved,' however, we have looked not to our own conceptions of decency, but to those of modern American society as a whole. As we have said, 'Eighth Amendment judgments should not be, or appear to be, merely the subjective views of individual Justices; judgment should be informed by objective factors to the maximum possible extent.' This approach is dictated by both the language of the Amendment—which proscribes only those punishments that are both 'cruel and unusual'—and by the 'deference we owe to the decisions of the state legislatures under our federal system.'" 492 U.S., at 369 (internal citations omitted).

In other instances, however, the Court has emphasized the importance of its "own judgment" over objective indicia of contemporary morality. *Atkins*, 536 U.S., at 312 (discussing *Coker* v. *Georgia*, 433 U.S. 584, 597 (1977)). *Amici* States submit that the proper metric of contemporary morality should be the objective determinations of the democratically elected federal and state legislatures, and that subjective assessments should enter constitutional analysis in only the narrowest of circumstances.

3. The national consensus in favor of Kentucky's three-drug protocol is overwhelming.

That lethal injection by protocol similar to that of Kentucky is firmly embedded in national consensus is beyond debate.

First adopted in 1977, lethal injection is now the default method for execution in every death-penalty State save Nebraska. *See* Note, *A New Test for Evaluating Eighth Amendment Challenges to Lethal Injections*, 120 Harv. L. Rev. 1301, 1301-02 (March 2007) (citing Deborah W. Denno, *When Legislatures Delegate Death: The Troubling Paradox Behind State Uses of Electrocution and Lethal Injection and What It Says About Us*, 63 Ohio St. L. J. 63, 92, 129 (2002)). "Of the thirty-eight death penalty states, lethal injection is the sole method of execution in twenty-eight states and is one of two methods of execution in nine." *See* Deborah W. Denno, *The Lethal Injection Quandary: How Medicine Has Dismantled the Death Penalty*, 76 Fordham L. Rev. 49, 59 (Oct. 2007).

The consensus in favor of lethal-injection is both strong and current. As one commentator recently reported,

> "[b]y 2001, all death penalty states in this country had switched to lethal injection, either entirely or as an option, with two exceptions. In 2002, Alabama changed from an electrocution-only execution state to a state that allows inmates to choose between electrocution and lethal injection. Nebraska still uses just electrocution." *Id.*, at 93.[2]

The consensus in favor of a three-drug protocol like Kentucky's is also powerful. According to two recent studies conducted by a commentator, "with two negligible exceptions, *all* states that reported their lethal injection drugs shared the same three-chemical combination." *Id.*, at 87 (emphasis

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2. The federal government implements whatever execution method is prescribed by the law of the State in which a federal death sentence has been imposed. 18 U.S.C.A. 3596 (2007).

added).[3] The consensus protocol involves the sequential administration of three drugs: sodium thiopental, pancuronium bromide, and potassium chloride. *Id.*, at 78. Sodium thiopental is "a common anesthetic for surgery used to cause unconsciousness." *Id.*, at 54. Pancuronium bromide is "a total muscle relaxant that stops breathing by paralyzing the diaphragm and lungs." *Id.* And potassium chloride is "a toxin that induces cardiac arrest and permanently stops the inmate's heartbeat." *Id.*

Kentucky's protocol delivers a sequence of 3 grams of sodium thiopental, 50 milligrams of pancuronium bromide, and 240 milliequivalents of potassium chloride. *Id.*, at 97 n.322. Texas's protocol is nearly identical, delivering a sequence of 3 grams of sodium thiopental, 100 milligrams of pancuronium bromide, and 140 milliequivalents of potassium chloride. *Id.*

In 2005, twenty-six States reported using the three-drug protocol.[4] In addition, thirteen States have reported the doses of each drug administered. *Id.*, at 97.[5] Notably, the

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3. The two States that reported different protocols are hardly noteworthy. In 2005, Oklahoma reported substituting a "very similar" compound, vecuronium bromide, for pancuronium bromide. *Id.*, at 97 n.320. North Carolina did not mention using potassium chloride in a 2001 report, but did list the chemical in a 2005 report. *Id.*

4. Those States were Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Indiana, Kansas, Kentucky, Louisiana, Maryland, Missouri, Montana, New Mexico, North Carolina, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Virginia, and Washington. *Id.*, at 97 n.318. According to trial-court testimony, New Jersey's lethal-injection protocol omits the dose of pancuronium bromide. J.A. 110.

5. Those States are Alabama, California, Colorado, Connecticut, Florida, Georgia, Kentucky, Maryland, New Mexico, North Carolina, Tennessee, Texas, and Washington. *Id.*, at 97 n.322.

Legislatures of fourteen States have passed statutes that specify the names or types of pharmaceuticals used or the protocol to be followed.[6]

In short, the consensus in favor of lethal injection by protocol similar to that of Kentucky is substantial. This consensus reflects widespread national acceptance of the methodology challenged in this case. Indeed, *amici* States are aware of no case in which the national consensus was so unequivocally unbalanced in favor of a method of punishment, where the method of punishment was nonetheless deemed *inconsistent* with contemporary moral standards.

In discerning present-day conceptions of the terms "cruel and unusual," the Court has given dispositive weight to present-day consensus. Because the present-day consensus is near unanimous in favor of Kentucky's lethal-injection methodology, by any measure the protocol is well within the range of punishments permitted by the Eighth Amendment.

4. The nation's ever-evolving standards of decency have been consistently effected by state governments.

To date, the Court has never intervened to re-write a State's death-penalty protocol. To the contrary, on each prior occasion that the Court has reviewed the methodology of a State's executions, the Court has held—expressly or impliedly—that the challenged methodology survives constitutional scrutiny.

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6. Those States are Arkansas, *see* A.C.A. §5-4-617; Idaho, *see* I.C. §19-2716; Illinois, *see* 725 ILCS 5/119-5; Maryland, *see* MD Code, Correctional Services, §3-905; Mississippi, *see* Miss. Code Ann. §99-19-51; Montana, *see* MCA 46-19-103; New Hampshire, *see* N.H. Rev. Stat. §630:5; New Jersey, *see* N.J.S.A. 2C:49-2; New Mexico, N.M.S.A. 1978, §31-14-11; North Carolina, *see* N.C.G.S.A. §15-188; Oklahoma, *see* 22 Okl. St. Ann. §1014; Oregon, *see* O.R.S. §137.473; Pennsylvania, *see* 61 P.S. §3004; and Wyoming, *see* W.S. 1966 §7-13-904.

See, e.g., Wilkerson, 99 U.S., at 134-35 ("Cruel and unusual punishments are forbidden by the Constitution, but. . . the punishment of shooting as a mode of executing the death penalty for the crime of murder in the first degree is not included in that category, within the meaning of the eighth amendment."); *Resweber*, 329 U.S., at 463 (affirming as constitutional a second attempt to execute an inmate by electrocution).

Indeed, the Court's traditional reluctance to involve itself in death-penalty policy-making is evidenced in the observation of one commentator in 1968 that, at the time, "not a single death penalty statute, not a single statutorily imposed mode of execution, not a single attempted execution has ever been held by any court to be 'cruel and unusual punishment' under any state or federal constitution." *See* Corinna Barrett Lain, *Furman Fundamentals*, 82 Wash. L. Rev. 1, 10 (Feb. 2007) (quoting Hugo Adam Bedau, *The Courts, the Constitution and Capital Punishment* 35 (1977)).

Since the Court's decisions in *Wilkerson* and *Resweber*, however, the nation's evolving standards of decency have been reflected in changing methods of execution. Thus, while "[i]n the [Nineteenth] [C]entury, hanging was the predominant method of execution in the United States," Petitioners' Br. 2 (citing *Getting to Death: Are Executions Constitutional?*, 82 Iowa L. Rev. 319, 364-65 (1997)), in the Twentieth Century "hanging was superseded by electrocution and gas," *id.* (citing *In re Storti*, 60 N.E. 210, 210 (Mass. 1901) (Holmes, C.J.)). And though electrocution was initially "widely hailed as a . . . humane method of execution," *id.* (citing *In re Kemmler*, 136 U.S., at 444), moral tides have most recently led to the adoption of lethal injection as the States' predominant method of death-penalty administration, *see* Note, 120 Harv. L. Rev. at 1301-02.

Indeed, even while inviting the Court's participation into execution-methodology policy-making, Petitioners fully

acknowledge the success of the Court's historic reluctance to do so. As Petitioners opine,

> "[t]he evolution of execution methods in this country reflects a continuing quest to find a more humane means of killing. . . . The problems are not always perceived as promptly as they could be, but *their perception produces change* aimed at eliminating unnecessary dangers of severe pain." Petitioners' Br. 1 (emphasis added).

The positive change of which Petitioners write is, in fact, the decisions of the States to respond legislatively to the nation's evolving moral preferences in the death-penalty context—*not* intervention by this Court.

To be sure, the nation's moral preferences may continue to evolve. Indeed, given historical trends, it is reasonable to assume that the nation's moral preferences are likely to change again. But the best measurement of where those preferences are today is not Petitioners' guess, but is instead the nation's legislative consensus, which points squarely to the almost universal acceptance of lethal injection using a protocol similar or identical to that of Kentucky. Simply put, federalism has worked in the death-penalty context: the nation's moral preferences for humane executions have been effected—over centuries—in State Houses across the country.

B. Because Kentucky's Lethal-Injection Protocol Is Neither Inherently Cruel Nor Unusual, There Is No Reason for the Court To Eschew Traditional Deference to National Consensus.

Because Kentucky's lethal-injection protocol is not inherently cruel and unusual, there is no reason for the Court to substitute its own judgment for the national consensus supporting the protocol's constitutional validity. Indeed, there is nothing in the Court's precedent indicating that Kentucky's

lethal-injection protocol can be fairly described as both inherently cruel and "unusual" so as to be barred by the Eighth Amendment.

1. Kentucky's protocol is not inherently cruel or barbarous.

Although the Court's explication of "cruel and unusual" as it pertains to methods of punishment has not been precise, the Court has nonetheless provided some meaningful guidance as to what the terms mean. In general, the Court has provided broad principles, not detailed constraints.

The Court has made clear, for example, that the Eighth Amendment bars those methods of punishment that are uncivilized—those "outside the bounds of . . . traditional penalties." *Trop*, 356 U.S., at 100. Punishments that "involve torture or a lingering death" are those intended to be prohibited by the Amendment. *Kemmler*, 136 U.S., at 447. Said another way, the Amendment prohibits methods of punishment that are inherently cruel, like those intended to inflict unnecessary pain. *Resweber*, 329 U.S., at 376. Examples identified by the Court include drawing and quartering, public dissection, or being burned alive. *Wilkerson*, 99 U.S., at 136.

Kentucky's lethal-injection protocol cannot be fairly characterized as a method of execution intended to involve torture, lingering death, or cruelty, as those terms are commonly understood. To the contrary, the protocol is expressly designed to result in a painless and dignified death that is not unnecessarily prolonged. Indeed, Petitioners' own expert acknowledges that, if the protocol is successfully implemented, it results in a humane death. J.A. 493-94.

Further, Petitioners necessarily reject the broad notion that lethal injection as a method of execution is barred by the Eighth Amendment. In this regard, Petitioners have asserted that an altered version of Kentucky's lethal-injection protocol *would* be

constitutional. *See* Petitioners' Br. 51-59. Accordingly, although the effectiveness of any specific lethal-injection protocol might be subject to debate by medical experts and legal scholars, no one in this case suggests that lethal injection itself is *inherently* cruel. And because inherent cruelty is and has been the Court's criterion for determining the constitutionality of a method of punishment, *see generally, Wilkerson*, 99 U.S., at 136; *Kemmler*, 136 U.S., at 447; *Resweber*, 329 U.S., at 376, the Court should hold that Kentucky's lethal-injection methodology survives Petitioners' constitutional challenge.

Attempting to avoid the Court's punishment-methodology jurisprudence, Petitioners assert that the Eighth Amendment bars government punishment whenever a theoretically less-risky or less-painful punishment can be demonstrated. *See* Petitioners' Br. 51. Thus, Petitioners place significant reliance on their proposed, untested alternatives to Kentucky's protocol—such as removing pancuronium bromide and potassium chloride from the lethal-injection regimen. *Id.* at 51-59. But the Court has made clear that the Constitution sets a ceiling—not a floor—for the exercise of States' judgment in selecting an execution method; it does not require States "to select the least severe penalty possible so long as the penalty selected is not cruelly inhumane or disproportionate to the crime involved." *Gregg*, 428 U.S., at 175. Thus, the existence of less severe, alternative punishments—including Petitioners' proposed, untested ones—do not render Kentucky's protocol in violation of the Eighth Amendment.[7]

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7. Indeed, requiring States to prove that their selected method of punishment is the least severe possible would contravene traditional burdens of proof. It is the Petitioners' heavy burden to demonstrate the unconstitutionality of Kentucky's protocol—not the State's burden to demonstrate that it selected the single, best method. *Cf. Gregg*, 428 U.S., at 175 ("[A] heavy burden rests on those who would attack the judgment of the representatives of the people.").

Likewise, the test applied by the Kentucky Supreme Court—that punishments are barred if they involve a "substantial risk" of unnecessary pain—finds no support in the Court's punishment-methodology jurisprudence. *Amici* States are not aware of any case in which the Court has held unconstitutional a punishment method because it involved a *risk* of pain. Rather than focusing on the risk of a punishment method being accidentally implemented in a painful fashion, the Court has instead focused on whether or not the method itself involves inherent cruelty, barbarity, torture, or an intent to cause suffering. *See, generally Wilkerson*, 99 U.S., at 136; *Kemmler*, 136 U.S., at 447; *Resweber*, 329 U.S., at 376.

Whatever hypothetical risks Petitioners assert with regard to Kentucky's lethal-injection protocol, it cannot seriously be suggested that Kentucky's administration of lethal injection falls into the same category as drawing and quartering, public dissection, or being burned alive. Those acts of torture involve a level of inherent cruelty that clearly evinces government intent to inflict pain on the individual being executed.

Because Kentucky's lethal-injection protocol plainly does not contemplate—indeed it strives to avoid—unnecessary pain or lingering death in the execution process, it is not "inherently cruel."

2. Kentucky's lethal-injection protocol is not unusual.

The Eighth Amendment prohibits those punishments that are cruel *and* unusual. U.S. Const., Amend. VIII. In *Trop*, 356 U.S., at 101 n.32, the Court noted that it had not yet determined whether the term "unusual" should be construed as having meaning independent of the term "cruel." The Court reasoned as follows:

> "Whether the word 'unusual' has any qualitative meaning different from 'cruel' is not clear. On the few

> occasions this Court has had to consider the meaning of the phrase, precise distinctions between cruelty and unusualness do not seem to have been drawn. These cases indicate that the Court simply examines the particular punishment involved in light of the basic prohibition against inhuman treatment, without regard to any subtleties of meaning that might be latent in the word 'unusual.' If the word 'unusual' is to have any meaning apart from the word 'cruel,' however, the meaning should be the ordinary one, signifying something different from that which is generally done." *Id.*, at 101 n.32.

The term "unusual" must mean *something* different than "cruel," else it has no meaning at all, and serves no purpose in the Constitution. The term "unusual" should be given its ordinary and independent meaning.

Indeed, construing each word to have its own meaning is entirely consistent with the Court's ordinary practice. *Kelo* v. *City of New London, Conn.*, 545 U.S. 469, 496 (2005) (O'Connor, J., dissenting) ("When interpreting the Constitution, we begin with the unremarkable presumption that every word in the document has independent meaning, 'that no word was unnecessarily used, or needlessly added.'") (quoting *Wright* v. *United States*, 302 U.S. 583, 588 (1938)). As the Court observed in *Wright*,

> "[t]o disregard such a deliberate choice of words and their natural meaning would be a departure from the first principle of constitutional interpretation. 'In expounding the Constitution of the United States . . . every word must have its due force, and appropriate meaning; for it is evident from the whole instrument, that no word was unnecessarily used, or needlessly added. The many discussions which have taken place upon the construction of the constitution, have proved

> the correctness of this proposition; and shown the high talent, the caution, and the foresight of the illustrious men who framed it. Every word appears to have been weighed with the utmost deliberation, and its force and effect to have been fully understood." 302 U.S., at 588 (quoting *Holmes* v. *Jennison*, 39 U.S. 540, 570-71 (1840) (Taney, C.J.)).

Applying the Court's "unremarkable presumption" that each word should have its own meaning, *Kelo*, 545 U.S., at 496, the Court should hold that "unusual" means something different than "cruel." As the Court has already explained, "unusual" ordinarily means "something different from that which is generally done." *Trop*, 356 U.S., at 101 n.32.

Given that nearly every lethal-injection State administers the death penalty in a manner that is similar or identical to Kentucky's, it is clear that Kentucky's protocol is not, in any way, unusual. It is *not* "different from that which is generally done." To the contrary, Kentucky's protocol *is* "that which is generally done." Accordingly, the Court should hold that Kentucky's protocol is permitted by the Eighth Amendment to the United States Constitution because it is not "unusual."

Having no reason to disregard the nation's consensus in favor of the protocol, therefore, the Court should hold that Kentucky's three-drug lethal-injection protocol is not barred by the Eighth Amendment's prohibition on "cruel and unusual" punishments.

II. If the Court Adopts the Kentucky Supreme Court's Eighth Amendment Test, the Court Should Nonetheless Uphold the Constitutionality of Kentucky's Lethal-Injection Protocol Because the Record Does Not Support the Conclusion That the Protocol Creates a Substantial Risk That Petitioners Will Suffer Unnecessary Pain, "Torture," or "Lingering Death."

If the Court does not resolve Petitioners' challenge based upon the overwhelming national consensus supporting Kentucky's lethal-injection protocol and the fact that the protocol is not itself inherently cruel and unusual, Petitioners' claim nevertheless must fail under the Eighth Amendment test applied by the Kentucky Supreme Court. As the Kentucky courts correctly concluded, the record in this case does not support Petitioners' claim that Kentucky's protocol will subject them to a substantial risk if unnecessary pain. The actual evidence—as opposed to Petitioners' assertions—demonstrates that Kentucky's protocol is likely to result in a humane death.

Notably, Petitioners' proposed standard for determining whether a method of punishment is barred by the Eighth Amendment is effectively the same as that applied by the Kentucky Supreme Court and endorsed by Respondents. Whereas Petitioners argue that a method of punishment is unconstitutional if it imposes "a significant and unnecessary risk of severe pain," *see* Petitioners' Br. 32, the Kentucky Supreme Court reasoned that a method of execution "must not create a substantial risk of wanton or unnecessary infliction of pain, torture, or lingering death." J.A. 805.[8]

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8. Petitioners' proposed standard for determining whether a method of punishment is cruel and unusual appears to vary over the course of their brief. Although their clearest articulation appears to be that a punishment cannot "impose a significant and unnecessary risk of severe pain," *see* Petitioners' Br. 32, Petitioners elsewhere

Whether articulated as requiring a showing of a "significant risk" or a "substantial risk," the parties appear to agree that the showing of a mere *possibility* of injury is not sufficient to demonstrate that a method of punishment violates the Eighth Amendment. And, applying either parties' articulation (or the trial court's), Petitioners fail to meet their burden of proof. The evidence presented to the district court demonstrates that Petitioners made no showing of any quantified risk of severe pain to persons executed under Kentucky's lethal-injection protocol.

A. All Agree That Successful Implementation of Kentucky's Protocol Will Lead to a Humane Death.

The ultimate conclusion of both Petitioners' leading expert, Dr. Mark Heath, and Respondents' leading expert, Dr. Mark Dershwitz, was the same: If Kentucky's protocol operates as it is designed to operate, the end result will be a humane death for the executed inmate—*not* severe pain. For example, Dr. Heath testified that if even a smaller dose of sodium thiopental is correctly administered, the result would be "a humane death" "[i]n *virtually every case*." J.A. 493-94 (emphasis added). And with a successfully administered three-gram dose—like Kentucky's—Dr. Heath concluded that "the thiopental would render [the inmate] deeply unconscious, to the point where no stimulation, even the very painful stimulation of potassium, would cause any response. . . . [I]t would be completely humane." J.A. 540-41.

Dr. Dershwitz likewise agreed that following Kentucky's three-drug protocol as prescribed would result in a humane form of execution. J.A. 566. He concluded that the protocol

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argue that a punishment cannot impose *any* "unnecessary risk of pain." *id.* at 35. Still elsewhere, Petitioners concede that the Constitution does not require States "to eliminate every risk." *Id.* at 39

would not cause undue pain and suffering during an execution—that from the inmate's point of view, the administration of the protocol is "no different than undergoing a general anesthetic for surgery." J.A. 565. Dr. Dershwitz also stated that "after a three-gram dose of thiopental" is delivered to an inmate, "nothing that happens to the inmate after that will be perceptible." J.A. 560. The inmate will be "unaware of his or her surroundings completely." J.A. 559. In fact, "after a three-gram dose of thiopental, the inmate will be unconscious and will remain unconscious for hours." J.A. 557.

Accordingly, Petitioners' objections to the three-drug protocol appear considerably misdirected. If successfully implemented, the protocol will not cause severe or unnecessary pain—even according to Petitioners' own expert.

B. Petitioners' Presentation of the Potential Risks Involved in Implementing Kentucky's Protocol Dramatically Overstates the Record Evidence.

Unable to take issue with Kentucky's protocol if successfully implemented, Petitioners instead opine that the State's "procedures [for implementing the protocol] create a setting in which botched executions are not only possible but highly likely." *See* Petitioners' Br. 49. Petitioners argue that if the intended dose of sodium thiopental is not correctly delivered to the condemned inmate, he or she may experience an extraordinary amount of pain upon receiving the lethal dose of potassium chloride—pain that would not be known to observers if the dose of pancuronium bromide *was* successfully administered.

But the problems with Petitioners' conclusion are two-fold. First, none of the risks of errors identified by Petitioners is likely to lead to excruciating pain for an executed individual because Kentucky's administrators *would know* if the dose of thiopental is not delivered prior to administering any additional pharmaceuticals to the inmate. Second, the evidence does *not*

actually indicate that any of the risks identified by Petitioners is "significant" or "substantial."

1. A failed delivery of sodium thiopental would be readily observable prior to any attempt to deliver the remainder of the three-drug protocol.

Petitioners identify four potential problems that could occur in an unsuccessful implementation of Kentucky's protocol: (1) that Kentucky's administrators might incorrectly prepare the sodium thiopental dose, *see* Petitioners' Br. 45-46; (2) that the administrators might incorrectly insert the I.V.s that deliver the sodium thiopental, *id.*, at 46-47; (3) that the administrators might be too far away from the executed individual to detect signs of consciousness, *id.*, at 47-48; and (4) that Kentucky's personnel are insufficiently qualified to administer intravenous drugs, *id.*, at 48-49. Again, all four scenarios rely on the assumption that if the sodium thiopental is not delivered, the potassium chloride will cause excruciating pain.

But the expert evidence is uncontested that if the sodium thiopental were not successfully delivered, Kentucky's lethal-injection administrators would know of the problem *"well before* [they] started the injections of anything else." J.A. 600 (emphasis added). First, they would know because the inmate *would still be conscious.* When successfully administered, sodium thiopental causes a person to lose consciousness "in less than a minute." J.A. 601. Thus, if the inmate did not receive the sodium thiopental, he would not lose consciousness, *id.*—something readily observable to even lay persons. Second, if the sodium thiopental was delivered into the inmate but not into a vein, the inmate would not only "not lose consciousness," but he would also react to the relatively painful event of drug delivery into a tissue site other than a vein. *Id.*

Accordingly, Petitioners' worst-case-scenario hypothetical—that the pancuronium chloride would mask the

non-delivery of sodium thiopental, leading to a painful death by potassium chloride—is unrealistic because everyone in the room would know if the sodium thiopental were unsuccessfully delivered "well before" "injections of anything else" were administered. J.A. 600.

2. Regardless, the record evidence fails to demonstrate a "significant" or "substantial" risk that the protocol's designated dose of sodium thiopental will not be delivered to the inmate.

Petitioners assert that errors leading to the failed delivery of sodium thiopental are highly likely to occur. *See* Petitioners' Br. 49. The evidence does not support their argument.

Petitioners assert that Kentucky's personnel "are likely to struggle to calculate and prepare the correct dose" of sodium thiopental. *Id.* at 46. But Petitioners' own expert, Dr. Heath, testified that he did not know enough about Kentucky's protocol to say how difficult preparing the thiopental would be. J.A. 527 ("I don't know what the details of [Kentucky's] protocol are, so I don't know how difficult it is to follow it."). And, when faced with the documented fact that Kentucky utilizes sodium thiopental that comes *pre*-measured, even Dr. Heath had to concede that preparing the solution for delivery "is not difficult to do." J.A. 527. Dr. Dershwitz agreed, explaining that mixing the pre-measured sodium thiopental solid with the pre-measured liquid is *not* hard. J.A. 623. Moreover, after weighing the testimony presented at trial, the district court too concluded that if the manufacturer's instructions are followed, "there would be minimal risk of improper mixing, despite converse testimony." J.A. 761.[9]

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9. The Court should defer to the state court's findings of fact. *Hernandez* v. *New York*, 500 U.S. 352, 366 (1991).

Second, Petitioners assert that Kentucky's administrators might insert the sodium thiopental I.V. incorrectly. *See* Petitioners' Br. 46-47. Yet again, the evidence does not support Petitioners' argument. Foremost, Petitioners do not present any evidence of the likelihood of such a problem, nor do they rebut the expert conclusion that incorrect delivery of thiopental into an I.V. would be obvious. And in any event, Petitioners' expert, Dr. Heath, admitted that Kentucky's specific I.V. administrators "definitely . . . would be able" to effectively insert an I.V. into a vein. J.A. 516-17.

Third, Petitioners argue that the distance between Kentucky's lethal-injection administrators and the inmate might prevent the administrators from observing signs of consciousness after a failed delivery of sodium thiopental. *See* Petitioners' Br. 47. Petitioners cite absolutely no evidence demonstrating any risk of this occurring. Indeed, given that two state officials remain in the execution chamber with the inmate, *id.* at 47, it is implausible that no one would notice the observable signs of consciousness. And given the uncontroverted expert testimony that the failure to deliver sodium thiopental *would* be observable due to either the inmate's outward signs of complete awareness *or* his exhibitions of pain from a botched I.V., J.A. 600-01, Petitioners' lack of evidence to the contrary is particularly consequential.

Finally, Petitioners assert that Kentucky's personnel are unqualified to administer the sodium thiopental I.V.s. *See* Petitioners' Br. 48. Yet again, Petitioners fail to quantify this risk in any way, and fail to offer record support specific to Kentucky's actual administrative personnel. *Id.* And again, the argument is rebutted by Petitioners' own expert, who specifically concluded that Kentucky's specific personnel *are* capable of properly administering I.V.s. J.A. 516-17.

More generally, not every execution that Petitioners characterize as potentially "botched" carries a significant risk

of severe pain. Petitioners principally suggest one very specific series of events that, hypothetically, could yield severe pain: (1) an inmate is administered what is supposed to be a lethal dose of the first drug, sodium thiopental, and yet remains somehow still conscious; (2) the officials do not notice that the inmate is still conscious; (3) the officials administer a lethal dose of the second drug, pancuronium bromide; (4) the inmate still somehow remains conscious, and is now paralyzed; and (5) the officials then administer a lethal dose of the third drug, potassium chloride, causing severe pain to and then death of the paralyzed and still conscious convict.

Thus, under Petitioners' theory, for extreme pain to predictably result, several implementation errors must occur in succession. The problem with this theory is that Petitioners have presented no proof that any one of these errors is "substantially likely" to occur in any particular execution—much less that all of them are likely to occur *seriatim*.

Petitioners instead point to several anecdotal accounts to suggest that this sequence of events might possibly have occurred in other States. And none of those anecdotes proves necessarily that the hypothetical sequence has occurred even once.

For example, Petitioners state that California has experienced "six aberrant executions" of the eleven it has carried out. Petitioners' Br. 22. But, as Petitioners themselves describe, these "aberrant" executions involved an inmate's "exhibiting signs consistent with insufficient anesthesia," and inmates "who continued to breathe for far longer than they should have if they had received a full dose of thiopental." Petitioners' Br. 22-23. But the fact that an inmate was still breathing—that is, that the lethal dose of sodium thiopental had not yet caused his *death*—does *not* necessarily mean he was conscious or experienced any pain. And although an

inmate's exhibiting some signs of insufficient anesthesia may raise some doubt as to his state of consciousness, it does not establish that he was awake and experienced any pain.

Petitioners similarly reference a situation in Missouri where the doses of thiopental given to inmates were "significantly lower than the intended dose," from which Petitioners conclude that "because the inmates were [later] given the [second, paralytic drug] there is no way to know, after the fact, whether they received doses of anesthetic sufficient to render them unconscious." Petitioners' Br. 23. By its terms, Petitioners' argument does not purport to prove that the inmates in fact suffered pain; instead, Petitioners' theory simply assumes that it is likely that, in each of these cases, not only were the doses of thiopental insufficient to cause the inmates to lose consciousness, but also that none of the state officials would have noticed if the inmate had remained awake.

Finally, Petitioners point to a single execution in Florida, the execution of Angel Diaz. That is the single case where there may be direct evidence that an inmate might have been conscious when he received the second drug (although not necessarily the third). *See* Petitioners' Br. 20-21. But again, nothing is proven. Indeed, the execution of Joseph Clark in Ohio, on which Petitioners also rely, stands as a powerful indication that, when the first drug is not properly administered, there are likely to be readily visible signs that the inmate is still conscious—in Clark's case, he sat up and told the execution team members that the first drug was not affecting him. Petitioners' Br. 22.

At best, these isolated anecdotes suggest that it is possible that, in those specific instances, an error produced unintended pain. Yet Petitioners have not proven that any such errors have ever occurred *in Kentucky*, nor, tellingly, have they proven to a certainty that this precise sequence has in fact happened even once in any other State.

In the last three decades, nearly a thousand executions have been conducted using the three-drug protocol at issue in this case. *See* The Clark County (Indiana) Prosecuting Attorney, *U.S. Executions Since 1976* http://www.clarkprosecutor.org/html/death/usexecute.htm. Out of all those executions, Petitioners can identify, in the end, only a single case—in another State—where there may be direct evidence that an inmate might have accidentally received the second (but not necessarily the third) drug while still conscious. Under any standard, this record as a whole does not demonstrate a "significant" or "substantial" risk that Ralph Baze or Thomas Bowling will experience severe pain while being executed by the Commonwealth of Kentucky for their crimes of capital murder.

In sum, although Petitioners assert that Kentucky's protocol is "highly likely" to lead to painful executions, Petitioners' Br. 41, their own evidence does not support their claim. Rather than offering any evidence of a quantified risk of extraordinary pain, Petitioners' own expert testified that Kentucky's protocol, when followed, will result in a *humane* death. J.A. 493-94, 540-41. Given the lack of evidence to support Petitioners' broad arguments of likely pain, the Court should reject Petitioners' claims and hold—consistent with both the evidence in this case and the Court's prior jurisprudence—that Kentucky's three-drug protocol is not barred by the Eighth Amendment to the United States Constitution.

CONCLUSION

The Court should affirm the judgment of the Supreme Court of Kentucky.

Respectfully submitted,

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